Cumulative Index 1987
FEMS Microbiology Letters Vols. 40–44
FEMS Microbiology Ecology Vol. 45
FEMS Microbiology Reviews Vol. 46

FEMS MICROBIOLOGY INDEX

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Volumes 40–44, 1987

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FEMS MICROBIOLOGY ECOLOGY

Volume 45, 1987

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FEMS MICROBIOLOGY REVIEWS

Volume 46, 1987

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FEMS Microbiology Reviews will publish review articles and review letters covering the entire field of microbiology. Emphasis will be placed on topicality and readability.

Notes to authors

Contributions should be sent to Prof. G. Gottschalk, Editor-in-Chief, or to one of the associate editors, who will arrange for them to be considered.

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FEMS Microbiology Index (1987) 9–28
Published by Elsevier

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Published by Elsevier

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L-Aspartase
Escherichia coli; L-Asparaginase; (*fnr* gene) (Jerlström, P.G. (41) 127)

Assay, microbiological
Pseudomonas aeruginosa; Sediment, salt-marsh; Total organic carbon (Nedwell, D.B. (45) 47)

ATP pool
Temperature; Adenylate energy charge; *Escherichia coli* (Kahru, A. (41) 305)

Atrophic rhinitis
Pasteurella multocida toxin; Bone resorption; Osteoclast activity (Foged, N.T. (43) 45)

Attractant
Trap formation; Morphogenesis; Low nutrient salt medium; Nematode; Nematophagous fungus (Saxena, G. (45) 319)

Auranthine
Penicillium aurantiogriseum; (Biosynthesis) (Yeulet, S.E. (41) 207)

Aureobasidium pullulans
Heavy metals; Protoplasts (Gadd, G.M. (45) 261)

Autolysis
Escherichia coli; Colicin A; Cell lysis; Colicin release (Howard, S.P. (42) 147)

Auxotrophic mutant
Escherichia coli; Methylotrophic bacterium; Plasmid transfer; Phenotype restoration (Al-Taho, N.M. (43) 235)

Azospirillum brasilense
Agrobacterium tumefaciens; *Azospirillum lipoferum*; Virulence gene; (DNA homology) (Waelkens, F. (43) 241)

Azospirillum lipoferum
Azospirillum brasilense; *Agrobacterium tumefaciens*; Virulence gene; (DNA homology) (Waelkens, F. (43) 241)

Azotobacter chroococcum
Nitrate assimilation; Nitrogen fixation (Cejudo, F.J. (43) 5)

Azotobacter vinelandii
Transformation; Competence; Iron; Siderophore (Page, W.J. (41) 257)

Azurin
H.8 antigen; Lipoprotein; *Neisseria gonorrhoeae* (Gotschlich, E.C. (43) 253)

Bacillus acidocaldarius
pH; Proton conductance (Guffanti, A.A. (41) 275)

Bacillus anthracis
Kanamycin; Transformation; Resistance plasmid (Makino, S.-i. (44) 45)

***Bacillus* sp.**
Cell wall; S-layer (Wahlberg, J. (40) 75)

Alkaline cellulase; (Truncation analysis; Alkalophilic strain) (Fukumori, F. (40) 311)

Bacillus stearothermophilus
Plasmid; DNA recombination; Plasmid integration; Plasmid excision (Min, Z. (44) 77)

Bacillus subtilis
Protoplast; Transformation; Plasmid; (Regeneration medium) (Puyet, A. (40) 1)

Streptomycin adenylyltransferase; (Purification; Characterisation) (Kono, M. (40) 223)

Respiration; Cell cycle; (Oscillations; Effect of inhibitors) (Hart, A.J. (40) 339)

Sucrose; Sucrase; Levansucrase; (Gene cloning) (Débarbouillé, M. (41) 137)

Escherichia coli; Bacteriophage T5; Transcription; Promoter (Melin, L. (41) 141)

Succinate dehydrogenase; Operon; (Deletion) (Fridén, H. (41) 203)

Conjugal plasmid transfer; Conjugal mobilization; *Clostridium acetobutylicum*; Integrational plasmid; Plasmid (Oultram, J.D. (42) 113)

Bacillus subtilis
Heat-shock protein; (localization) (Qoronfleh, M.W. (43) 373)

Levansucrase; Regulatory gene (Martin, I. (44) 39)

DNases; corynebacteria; SDS-polyacrylamide gels; DNase-plate assay (Rama, J.M. (44) 343)

Bacillus thuringiensis
δ-Endotoxin gene; (DNA homology); (Plasmid) (Earp, D.J. (42) 195)

Cytolytic activity; (Insect tissue culture) (Johnson, D.E. (43) 121)

Bacteria
Phagocytes; Amoeba; Leukocytes; Adhesins (Lock, R. (44) 135)

Bacterial adherence
Adhesin; Carbohydrate-binding protein; (Oral microbial lectin) (Murray, P.A. (40) 123)

Bacterial adhesion
Hydrophobicity; Surface free energy; Zeta potential; Oral Streptococci (Busscher, H.J. (46) 165)

Bacterial community
Sediment, estuarine; Nitrate; Ammonium; Nitrate-reducing bacterium (King, D. (45) 15)

Bacterial enumeration
Caulobacter sp.; Lake; (Mesotrophic lake) (Staley, J.T. (45) 1)

Bacterial glycerol metabolism
Glycerol determination; *Propionibacteria*; Enzyme production; Enzyme screening (Ince, J.E. (44) 185)

Bacterial identification
Citrobacter diversus; Bacterial membrane proteins; Penicillin binding proteins (Davies, D.B. (42) 169)

Bacterial membrane proteins
Citrobacter diversus; Bacterial identification; Penicillin binding proteins (Davies, D.B. (42) 169)

Bacteriochlorophyll
Anoxygenic photosynthesis; Green sulphur bacterium; Purple sulphur bacterium; Cyanobacterium (Pierson, B. (45) 365)

Bacteriochlorophyll *g*
Heliobacillus mobilis; Nitrogen fixation; (Rice paddy ecology) (Beer-Romero, P. (4) 109)

Bacteriocin
Streptococcus sp.; *Lactobacillus* sp.; *Enterococcus* sp.; (Growth inhibition) (James, S.M. (41) 321)

Bacteriophage
Bordetella pertussis; *Bordetella parapertussis*; Lysogenic conversion (Paloheimo, M. (41) 79)

Leuconostoc oenos; (Isolation); (Characterization) (Nel, L. (44) 63)

Salmonella phage MB78; Phage DNA synthesis (Verma, M. (44) 115)

Bacteriophage infection
Osmotic adaptation; K^+ transport; $^{86}Rb^+$ transport; *Escherichia coli* (Alatossava, T. (43) 177)

Bacteriophage MAC-1
Transformation; Transfection; Competence; *Bdellovibrio bacteriovorus* (Roberts, R.C. (43) 207)

Bacteriophage Mu
(*Escherichia coli*; *lig*ts mutant; Killing effect) (Buu, A. (40) 111)

Bacteriophage P1
DNA rearrangement; Recombination; Transposable element IS1; Lactose aperon; *Escherichia coli* (Iida, S. (43) 107)

DNA rearrangement; Cointegration; Deletion; R plasmid; Transposable element IS1 (Iida, S. (43) 111)

DNA rearrangement; Deletion; Inversion; Transposable element IS1; Recombination; R plasmid (Iida, S. (43) 117)

Bacteriophage receptor
Klebsiella pneumoniae; Lipopolysaccharide (Tomás, J.M. (41) 223)

Bacteriophage T5
Bacillus subtilis; *Escherichia coli*; Transcription; Promoter (Melin, L. (41) 141)

Bacteriophage typing
Salmonella virchow (Chambers, R.M. (40) 155)

Vibrio cholerae; (Geographical variation) (Frost, J.A. (40) 219)

Bacterium
Lactarius sp.; *Laccaria* sp.; Polysaccharide; (Bacteria from fungal material) (Chard, J.M. (40) 345)

Barbiturase
Enterobacter aerogenes; Uracil dehydrogenase; Uracil; (Oxidative catabolism) (Patel, B.N. (40) 33)

Bdellovibrio bacteriovorus
Transformation; Transfection; Competence; Bacteriophage MAC-1 (Roberts, R.C. (43) 207)

Benzylpenicillin
Zymomonas mobilis; Penicillin-binding protein; Mecillinam (Karibian, D. (41) 121)

Beta-aspartylglycine
Mucin; Coprostanol; Tryptic activity; Short-chain fatty acids; Microbiological analyses (Carlstedt-Duke, B. (45) 251)

Beta galactosidase
Pseudomonas aeruginosa; Gene expression; *Escherichia coli*; Consensus promoter; Δ^1-pyrroline 5-carboxylate reductase (Soldati, L. (42) 163)

Beta-tubulin
Crithidia fasciculata; Alpha-tubulin; Dispersed genes (Tittawella, I. (43) 317)

Binding proteins: Osmotic shock
Uptake kinetics (Mårdén, P. (45) 233)

Bioassay
Oligotrophic marine bacteria; Low-nutrient bacteria; Marine interfaces (Carlucci, A.F. (45) 211)

Bioconversion
Ecology; Lignin degradation; Cellulases; Xylanases; Saccharification (McCarthy, A.J. (46) 145)

Biodegradation
Alkyl sulphatase; Butyl sulphate; Propyl sulphate; Ethyl sulphate; Methyl sulphate; (Bacteria) (White, G.F. (40) 173)

Anthocyanin; Oxidation; Hydrogen peroxide; *Streptococcus durans*; Malvin (Pérez, J. (43) 33)

Pseudomonas putida; Phenol; Plasmid (Herrmann, H. (43) 133)

Bitumen (Brunner, C. (43) 337)

Xenobiotic compound; Inoculation study; *Pseudomonas* sp. strain P51; River water (Van der Meer, J.R. (45) 333)

s-Triazine (Cook, A.M. (46) 93)

Biofouling rig
Adhesion; Anti-adhesion; Procetyl 30; Surfactant; (Bacteria) (Humphries, M. (42) 91)

Biotinylated protein
Mycobacterium bovis; Gene library; Protein synthesis; Streptavidin (Collins, M.E. (43) 53)

Biotransformation
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Tetrachloromethane; 1,2-Dichloroethane; Trichloromethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Bitumen
Biodegradation (Brunner, C. (43) 337)

Bone-marrow cell
Leukopoiesis; Mitotic index; Virulence plasmid; *Yersinia enterocolitica*; (Mouse) (Román, S.M. (43) 219)

Bone resorption
Pasteurella multocida toxin; Atrophic rhinitis; Osteoclast activity (Foged, N.T. (43) 45)

Bordetella bronchiseptica
Dermonecrotic toxin; Polypeptides; Reconstitution (Kume, K. (44) 101)

Bordetella parapertussis
Bordetella pertussis; Lysogenic conversion; Bacteriophage (Paloheimo, M. (41) 79)

Bordetella pertussis
Infection; Respiratory infection; (Mouse) (Alonso, J.M. (40) 273)

Bordetella parapertussis; Lysogenic conversion; Bacteriophage (Paloheimo, M. (41) 79)

Monoclonal antibody; Passive protection; Haemorrhagic alveolitis; Adenylate cyclase; Pertussis toxini (Mouse) (Brézin, C. (42) 75)

tRNA phylogenesis; Rhizobium meliloti (Crenon, I. (44) 19)

Pertussis toxin; Monoclonal antibody; Immunoblotting (Anwar, H. (44) 141)

***Bordetella* sp.**
DNA sequence, repeated; (Phase variants) (McPheat, W.L. (41) 357)

Botryodiplodia theobromae
Protease; (Cocoa pod rot) (Fessehatzion, B. (43) 67)

Botulinum C_2 toxin
Clostridium botulinum; (Amino acid composition) (Takasawa, T. (40) 51)

Botulinum toxin
ELISA; Botulism; Diagnosis; (Chicken serum) (Sakaguchi, G. (43) 355)

Botulism
ELISA; Botulinum toxin; Diagnosis; (Chicken serum) (Sakaguchi, G. (43) 355)

Bradyrhizobium
Lipopolysaccharide; Sugar composition (Banoub, J.H. (44) 235)

Buoyancy
Microcystis aeruginosa; Gas vesicle; Chemostat; Phosphate limitation (Konopka, A. (45) 135)

1,3-Butadiene
Isoprene; *Nocardia* sp.; Mono-oxygenase; Epoxidation (Van Ginkel, C.G. (45) 275)

Butanol
Clostridium acetobutylicum; Amino acid; Acetone; Ethanol (Masion, E. (43) 269)

2-Butanol
Methanogenic bacterium; 2-Propanol; Acetone; 2-Butanone; (Preferential reductants); (Utilization) (Zellner, G. (44) 323)

2-Butanone
Methanogenic bacterium; 2-Propanol; 2-Butanol; Acetone; (Preferential reductants); (Utilization) (Zellner, G. (44) 323)

Butyl sulphate
Alkyl sulphatase; Biodegradation; Propyl sulphate; Ethyl sulphate; Methyl sulphate; (Bacteria) (White, G.F. (40) 173)

Butyric acid
Clostridium butyricum; Cytotoxic activity; Virulence; (Vero cell) (Popoff, M.R. (43) 95)

***n*-Butyric acid**
Adenovirus; Gene expression (Fernández-Puentes, C. (44) 69)

Cadaverine
Actinomycete; Polyamine; Putrescine; Spermidine; Spermine (Hamana, K. (41) 211)

Cadmium
Copiotrophic bacteria; Starvation; Seawater (Nyström, T. (45) 143)

Cadmium-resistance
Saccharomyces cerevisiae; Potassium loss (Theuvenet, A.P.R. (43) 147)

Calcium
Salmonella typhimurium; HeLa cell invasion; Virulence (Niesel, D.W. (41) 299)

Staphylococcal leukocidin; Cytotoxicity; (HL-60 cell) (Morinaga, N. (42) 259)

Calmodulin
Ceratocystis ulmi; Yeast; Filamentous fungus; Fungal dimorphism (Muthukumar, G. (41) 253)

Campylobacter coli
Tetracycline resistance; nucleotide sequence; DNA–DNA hybridization; gene dissemination (Sougakoff, W. (44) 153)

Campylobacter pyloridis
Immunoblot; DNA–DNA blot hybridization; (Relatedness between species) (Von Wulffen, H. (42) 129)

Drug sensitivity; Gastritis; Gastroduodenal ulcers; H_2 antagonists (Morgan, D.R. (42) 245)

Campylobacter sp.
Identification; (Southern hybridization); (16S rRNA genes) (Romaniuk, P.J. (43) 331)

Candida albicans
Morphogenesis; Trifluoperazine (Roy, B.G. (41) 327)

Poly (isobutyl cyanoacrylate) nanoparticles; Amphotericin B; 5-Fluorocytosine; Miconazole (Bajwa, P.S. (44) 413)

Candida utilis
Polyphosphate; Cell cycle; Nuclear magnetic resonance (Dawson, P.S.S. (43) 57)

Capsule
Streptococcus sp. (Group B); Sialic acid; Virulence; (Ultrastructure) (Molinari, A. (41) 69)

Carbadox
Resistance plasmids (Schmetzer, H. (44) 1)

Carbohydrate-binding protein
Adhesin; Bacterial adherence; (Oral microbial lectin) (Murray, P.A. (40) 123)

Carbohydrates
Cyanobacteria; Microbial mat; Osmotic adjustment; Glucosylglycerol; Trehalose; Sucrose (Stal, L.J. (45) 305)

Carbon dioxide
Saccharomyces cerevisiae; Amino acid absorption; Fermentation (Slaughter, J.C. (40) 239)

Carbon monoxide
Clostridium thermoaceticum; Methanol; Viologen dye (White, H. (43) 173)

Peptostreptococcus productus; (Metabolism) (Ma, K. (43) 367)

Rhodocyclus gelatinosus; Light; Carbon monoxide dehydrogenase (Champine, J.E. (44) 307)

Carbon monoxide dehydrogenase
Methanosarcina barkeri; Hydrogenase; Methanogenesis (Bhatnagar, L. (41) 337)

Rhodocyclus gelatinosus; Carbon monoxide; Light (Champine, J.E. (44) 307)

Carboxysome
Ribulose-1,5-bisphosphate carboxylase; *Thiobacillus neapolitanus* (Holthuijzen, Y.A. (42) 121)

***Caulobacter* sp.**
Bacterial enumeration; Lake; (Mesotrophic lake) (Staley, J.T. (45) 1)

Cell-culture contamination
Mycoplasma pirum; *Mycoplasma genitalium*; Lymphoblastoid cells (Leach, R.H. (44) 293)

Cell cycle
Bacillus subtilis; Respiration; (Oscillations; Effect of inhibitors) (Hart, A.J. (40) 339)

Membrane growth; Cytochrome; Escherichia coli (Scott, R.I. (43) 1)

Polyphosphate; Nuclear magnetic resonance; *Candida utilis* (Dawson, P.S.S. (43) 57)

Cell cycle dependence
Genome organization; Eukaryotic vector; DNA replication; Viral helper function; Oncolysis (Siegl, G. (46) 433)

Cell envelope
Clostridium sp.; Amylase; Pullulanase; Protein excretion; Chemostat (Antranikian, G. (41) 193)

Cell extracts
Psychrotrophic bacterium; *Arthrobacter* strain S_1-55; Proteolysis; Temperature (Potier, P. (44) 267)

Cell invasion, epithelial
Yersinia enterocolitica; (Inhibition with anticellular antibody) (Schiemann, D.A. (41) 19)

Cell lysis
Escherichia coli; Colicin A; Autolysis; Colicin release (Howard, S.P. (42) 147)

Cell nucleus
Sordaria brevicollis; Hyphae; Septal pore plugging; (Microscopy) (Collinge, A.J. (44) 85)

Cellobiose
Membrane transport; *Streptomyces graniticolor* (Jirelová, M. (41) 279)

Cell surface
Streptococcus salivarius; Adhesion; Surface free energy; Hydrophobicity (Van der Mei, H.C. (40) 15)

Escherichia coli; Hydrophobicity; Adhesion factor; Fimbria; Antigen (McConnell, M.M. (42) 59)

Cellulase
Trichoderma reesei; (Heterogeneity) (Sprey, B. (43) 25)

Ecology; Lignin degradation; Xylanases; Bioconversion; Saccharification (McCarthy, A.J. (46) 145)

***Cellulomonas* sp.**
Glycogen; (Accumulation; Degradation) (Schimz, K.-L. (40) 325)

Glycogen; Trehalose; Viability; Energy charge; Starvation (Schimz, K.-L. (40) 333)

Cell volume
Escherichia coli; Plasmid transformation; Transformation efficiency (Saunders, J.R. (42) 125)

Cell wall
Bacillus sp.; S-layer (Wahlberg, J. (40) 75)

Cell walls
Saccharomyces cerevisiae; Glucan; Glucosaminoglycan (Mol, P.C. (41) 95)

Fibrils; Agaricus bisporus (Garcia Mendoza, C. (44) 161)

Ceratocystis ulmi
Calmodulin; Yeast; Filamentous fungus; Fungal dimorphism (Muthukumar, G. (41) 253)

Chemostat
Clostridium sp.; Amylase; Pullulanase; Protein excretion; Cell envelope (Antranikian, G. (41) 193)

Microcystis aeruginosa; Buoyancy; Gas vesicle; Phosphate limitation (Konopka, A. (45) 135)

Chemotaxis
Agrobacterium tumefaciens; Ti-plasmid; Acetosyringone; (Crown gall, *vir*-region) (Ashby, A.M. (41) 189)

Chitin fermentation
Clostridium sp.; Oxygen tolerance (Pel, R. (44) 59)

Chlamydiae
Haemagglutination; EB membranes; Octylglucoside extract (Chong, K.L. (44) 225)

Chlamydia trachomatis
Diagnosis; Nucleic acid hybridisation; (Genito-urinary specimens) (Palva, A. (40) 211)

Lymphogranuloma venereum; (Uptake, Association) (Söderlund, G. (41) 163)

Elementary body; Reticulate body; Outer membrane protein; (Immunoblotting, Monoclonal antibody) (Cevenini, R. (42) 47)

Outer membrane protein; (Nucleotide sequence) (Pickett, M.A. (42) 185)

Chlamydomonas
Photosynthetic mutants; DNA, chloroplast; DNA, mitochondrial (Rochaix, J.-D. (46) 13)

Chlamydomonas reinhardtii
NADH diaphorase; Xanthine dehydrogenase (Pérez-Vicente, R. (43) 321)

Chloramphenicol acetyltransferase
Dihydrolipoamide acetyltransferase; Pyruvate dehydrogenase complex (Guest, J.R. (44) 417)

Chlorate resistance
Cloning vector; Positive selection; *Escherichia coli*; Plasmid; (*chlB* gene) (Reiss, J. (43) 201)

Chlorate sensitivity
Salmonella typhimurium; Nitrate reductase; (*chlC* and *phs* mutants) (Riggs, D.L. (44) 427)

Chlorella fusca
Isocitrate lyase; Enzyme oxidation (Henley, L.F. (44) 249)

Chlorine dioxide
Disinfection; Virus; Ozone; Peracetic acid; Effluent (Harakeh, S. (44) 335)

Chlorite
Nitrobacter winogradskyi; Nitrification; (HPLC) (Hynes, R.K. (41) 181)

4-Chlorobenzoate dehydrogenase
Pseudomonas sp.; (Properties) (Thiele, J. (41) 115)

Cholera toxin
Salmonella enterotoxin; Chromosomal gene; (Southern-blot hybridization) (Chopra, A.K. (43) 345)

Chromogen
Voges–Proskauer; Anthrone; Enterobacteriaceae (Yeoman, P. (44) 299)

Chromosomal gene
Salmonella enterotoxin; Cholera toxin; (Southern-blot hybridization) (Chopra, A.K. (43) 345)

Agrobacterium tumefaciens; Chromosome mobilization; R prime formation; Linkage mapping (Waelkens, F. (44) 329)

Chromosomal transformation
Gene enrichment; Gene cloning; *Streptococcus pneumoniae* (Pérez Ureña, M.T. (42) 153)

Chromosome mobilization
Agrobacterium tumefaciens; R prime formation; Linkage mapping; Chromosomal genes (Waelkens, F. (44) 329)

Cinchomeronic acid
o-Phthalic acid; Quinolinic acid (Taylor, B.F. (44) 401)

Citrate lyase regulation
Acetylation/deacetylation; Phosphorylation/dephosphorylation; Effect of glutamate (Antranikian, G. (46) 175)

Citrobacter diversus
Bacterial identification; Bacterial membrane proteins; Penicillin binding proteins (Davies, D.B. (42) 169)

Classification
Streptomycetes; (4-Methylumbelliferone derivative) (Goodfellow, M. (43) 39)

Isoprenoid quinones; Polar lipids; *Leptospiraceae* (Embley, T.M. (44) 273)

Classification and identification
Rhodococci; 7-amino-4-methylcoumarin derivatives (Goodfellow, M. (44) 349)

Cloning vector
Chlorate resistance; Positive selection; *Escherichia coli*; Plasmid; (*chlB* gene) (Reiss, J. (43) 201)

Clostridium acetobutylicum
Bacillus subtilis; Conjugal plasmid transfer; Conjugal mobilization; Integrational plasmid; Plasmid (Oultram, J.D. (42) 113)

L(+)-Lactate dehydrogenase; Enzyme activation; Fructose 1,6-bisphosphate (Freier, D. (43) 227)

Amino acid; Butanol; Acetone; Ethanol (Masion, E. (43) 269)

Clostridium botulinum
Botulinum C_2 toxin; (Amino acid composition) (Takasawa, T. (40) 51)

Clostridium butyricum
Butyric acid; Cytotoxic activity; Virulence; (Vero cell) (Popoff, M.R. (43) 95)

Clostridium perfringens
Spore protein; Spore; (Amino acid sequence) (Granum, P.E. (42) 225)

Clostridium perfringens epsilon toxin
(Histidyl residue) (Sakurai, J. (41) 317)

***Clostridium* sp.**
Amylase; Pullulanase; Protein excretion; Chemostat; Cell envelope (Antranikian, G. (41) 193)

Chitin fermentation; Oxygen tolerance (Pel, R. (44) 59)

Clostridium sporogenes
Alanine; Glycine; Stickland reaction; Metabolism; Syntrophism; Interspecies H_2 transfer; Methanogenic bacterium (Winter, J. (45) 153)

Clostridium thermoaceticum
Carbon monoxide; Methanol; Viologen dye (White, H. (43) 173)

Clostridium thermosaccharolyticum
Surface protein; S-layer; (3-D reconstruction) (Cejka, Z. (44) 13)

Clumping factor
Staphylococci; Fibrinogen; Fibronectin (Chhatwal, G.S. (44) 147)

Cointegration
DNA rearrangement; Deletion; R plasmid; Bacteriophage P1; Transposable element IS1 (Iida, S. (43) 111)

Cold adaptation
Nitrogenase; *Rhizobium* symbiosis (Prévost, D. (45) 205)

Colicin A
Escherichia coli; Cell lysis; Autolysis; Colicin release (Howard, S.P. (42) 147)

Colicin release
Escherichia coli; Colicin A; Cell lysis; Autolysis (Howard, S.P. (42) 147)

Colominic acid
Pasteurella haemolytica; Polysaccharide (Adlam, C. (42) 23)

Colony growth
Continuous culture; *Streptomyces coelicolor* A3(2) (Allan, E.J. (43) 139)

Community change
Soil bacteria; Polluted snow; Snowmelt; Acidic deposition; Functional properties (Thompson, I.P. (45) 269)

Competence
Azotobacter vinelandii; Transformation; Iron; Siderophore (Page, W.J. (41) 257)

Transformation; Transfection; *Bdellovibrio bacteriovorus*; Bacteriophage MAC-1 (Roberts, R.C. (43) 207)

Competition
Rhizobium sp.; Soil; Inoculation; (Mung bean) (Rangarajan, M. (45) 85)

Complementation
Prime plasmid; *Methylophilus methylotrophus*; Heterologous gene expression; Plasmid transfer (Kearney, P. (44) 7)

Compost
Ethene-utilizing bacteria; Growth; Stability (Van Ginkel, C.G. (45) 65)

Conjugal mobilization
Bacillus subtilis; Conjugal plasmid transfer; *Clostridium acetobutylicum*; Integrational plasmid; Plasmid (Oultram, J.D. (42) 113)

Conjugal plasmid transfer
Bacillus subtilis; Conjugal mobilization; Clostridium acetobutylicum; Integrational plasmid; Plasmid (Oultram, J.D. (42) 113)

Conjugation
Lactic acid bacteria; Starter culture; Plasmid; Genetic engineering; Transformation; Transduction (Sandine, W.E. (46) 205)

Plasmid; *Lactobacillus* sp.; Transformation; Transfection; Liposome; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Restriction and modification; Phage adsorption; Genetic transfer; Phage-insensitive starters (Klaenhammer, T.R. (46) 313)

Consensus promoter
Pseudomonas aeruginosa; Gene expression; *Escherichia coli*; Beta galactosidase; Δ^1-pyrroline 5-carboxylate reductase (Soldati, L. (42) 163)

Continuous culture
Colony growth; *Streptomyces coelicolor* A3(2) (Allan, E.J. (43) 139)

Pigment synthesis; Yield; Affinities for thiosulfate and oxygen; Transient state (De Wit, R. (45) 117)

Copiotrophic bacteria
Cadmium; Starvation; Seawater (Nyström, T. (45) 143)

Copper uptake
Saccharomyces cerevisiae (De Rome, L. (43) 283)

Coprinus cinereus
Glutamate dehydrogenase; Glutamine synthetase; Ammonium (Moore, D. (44) 239)

Coprostanol
Mucin; Tryptic activity; Short-chain fatty acids; Beta-aspartylglycine; Microbiological analyses (Carlstedt-Duke, B. (45) 251)

Coralloides
Myxococcus; *Myxococcus fulvus*; Diffusible factor; Morphogenesis; Aggregation (Ruiz, C. (43) 143)

Coriolus versicolor
Lignin biodegradation; Peroxidase; Veratryl alcohol (Dodson, P.J. (42) 17)

Corynebacteria
DNases; *Bacillus subtilis*; SDS-polyacrylamide gels; DNase-plate assay (Rama, J.M. (44) 343)

Corynebacterium
Testosterone; (Metabolism) (Nixon, A. (41) 53)

Cowpea
Rhizobium sp.; Soil, tropical; (Growth, Survival) (Aarons, S. (45) 77)

Crithidia fasciculata
Alpha-tubulin; Beta-tubulin; Dispersed genes (Tittawella, I. (43) 317)

Cross-resistance
Streptomycin dependent; Non-nodulating; Slow-growing rhizobia (Ahmad, M.H. (44) 357)

Cryptic gene
Inactive genes; Pseudogene; Gene duplication; Evolution (Beacham, I.R. (46) 409)

Cultivation method
Gradient plate, gel-stabilised; Microorganism; (Response to environment) (Wimpenny, J. (40) 263)

Cultured buttermilk
Lactic acid bacteria; Yoghurt; Kefir; Lactose digestion; Protein quality; Vitamin (Gurr, M.I. (46) 337)

Cutaneous culture
Oxygen; *Propionibacterium sp.* (Cove, J.H. (43) 61)

Cyanide
Pseudomonas fluorescens; Nickel cyanide; (Nitrogen source) (Rollinson, G. (40) 199)

Cyanobacteria
Nitrogen reserve; Cyanophycin; *Synechococcus* sp.; Phycobiliproteins; Marine phytoplankton (Newman, J. (44) 221)

Microbial mat; Osmotic adjustment; Carbohydrates; Glucosylglycerol; Trehalose; Sucrose (Stal, L.J. (45) 305)

Microbial mat; Purple sulphur bacterium; Green sulphur bacterium; Ultrastructure; Pigment analysis; Electron microscopy; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Bacteriochlorophyll; Anoxygenic photosynthesis; Green sulphur bacterium; Purple sulphur bacterium (Pierson, B. (45) 365)

Cyanophycin
Cyanobacteria; Nitrogen reserve; *Synechococcus* sp.; Phycobiliproteins; Marine phytoplankton (Newman, J. (44) 221)

Cyclic retention
Ammonium pool; Nitrogen control (Narula, N. (44) 193)

Cytochrome
Streptomyces sp.; Respiratory chain; (3 Thermotolerant species). (Edwards, C. (40) 61)

Membrane growth; Cell cycle; Escherichia coli (Scott, R.I. (43) 1)

Escherichia coli; Haem (Gennis, R.B. (46) 387)

Cytochrome *c* oxidase
Haem aa_3; Electron transport, bacterial (Ludwig, B. (46) 41)

Cytolethal distending toxin
Cytotoxin; Enterotoxin; *Escherichia coli*; (CHO cell) (Johnson, W.M. (43) 19)

Cytolytic activity
Bacillus thuringiensis; (Insect tissue culture) (Johnson, D.E. (43) 121)

Cytomegalovirus
Peritoneal macrophage; Acute infection; Antiviral activity; (Rat) (Hendrix, M.G.R. (43) 213)

Cytoplasmic pH
Fermentation end products; Proton motive force; Osmotolerance; Glycine betaine; Lactic acid bacteria (Kashket, E.R. (46) 233)

Cytotoxic activity
Clostridium butyricum; Butyric acid; Virulence; (Vero cell) (Popoff, M.R. (43) 95)

Cytotoxicity
Staphylococcal leukocidin; Calcium; (HL-60 cell) (Morinaga, N. (42) 259)

Cytotoxin
Escherichia coli; Verocytotoxin; Enterotoxin; (Vero cell purification) (Petric, M. (41) 63)

Shiga-like toxin; Haemorrhagic colitis; Haemolytic-uraemic syndrome; *Escherichia coli*; (Antigenic heterogeneity) (Johnson, W.M. (43) 15)

Enterotoxin; *Escherichia coli*; Cytolethal distending toxin; (CHO cell) (Johnson, W.M. (43) 19)

Dairy product
Antimicrobial activity; Protection against disease; Anticholesteremic factor; Anticarcinogenic activity; *Lactobacillus* sp. (Fernandes, C.F. (46) 343)

Death rate
Escherichia coli; (Mutant) (Jörgensen, F. (40) 43)

Anaerobic fungi; Rumen; Plant structural material; Fermentation (Mountfort, D.O. (46) 401)

Deinococcus radiodurans
Outer membrane protease; S-layer protein; Protease (Emde-Kamola, B. (42) 69)

Deletion
DNA rearrangement; Cointegration; R plasmid; Bacteriophage P1; Transposable element IS1 (Iida, S. (43) 111)

DNA rearrangement; Inversion; Transposable element IS1; Recombination; R plasmid; Bacteriophage P1 (Iida, S. (43) 117)

3-*O*-Demethylmonensins, Biosynthesis
Streptomyces cinnamonensis; Methylation inhibitors; Monensins; *p*-Aminosalicylic acid; Sulphonamides; Aminopterine (Pospíšil, S. (44) 283)

3-Deoxy-D-manno-2-octulosonic acid
Legionella pneumophila; (Gas chromatography) (Guerrant, G.O. (42) 1)

Dermonecrotic toxin
Bordetella bronchiseptica; Polypeptides; Reconstitution (Kume, K. (44) 101)

Pasteurella multocida; Polypeptides; Reconstitution (Nakai, T. (44) 259)

Desferrioxamine B
Siderophore; Hydroxamate; Lysine decarboxylase; Iron; *Streptomyces pilosus* (Schupp, T. (42) 135)

Desulfobacterium autotrophicum
Methanobacterium thermoautotrophicum; Biotransformation; Tetrachloromethane; 1,2-Dichloroethane; Trichloromethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Desulfovibrio vulgaris
Mass spectrometry; Hydrogen cycling (Peck, Jr., H.D. (40) 295)

Dextransucrase
Protonmotive force; Valinomycin; Nigericin; *Leuconostoc mesenteroides*; Enzyme secretion (Otts, D.R. (42) 179)

Diagnosis
Chlamydia trachomatis; Nucleic acid hybridisation; (Genitourinary specimens) (Palva, A. (40) 211)

ELISA; Botulinum toxin; Botulism; (Chicken serum) (Sakaguchi, G. (43) 355)

Dialysis culture
Syntrophic anaerobic bacteria (Stieb, M. (45) 71)

Diarrhoea
Escherichia coli; Heat-stable enterotoxin; Receptor; (Piglet) (Saeed, A.M. (43) 247)

1,2-Dichloroethane
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Biotransformation; Tetrachloromethane; Trichloromethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Dichloromethane
Methylosinus trichosporium; Methane monooxygenase; (Deficient mutant) (Nicolaidis, A.A. (41) 47)

Dictyostelium discoideum
Ribosomal RNA; RNA synthesis; AMP, cyclic (Uchiyama, S. (40) 99)

Protein synthesis; (In vitro translation) (Ntamere, A.S. (41) 29)

Diffusible factor
Myxococcus; *Coralloides*; *Myxococcus fulvus*; Morphogenesis; Aggregation (Ruiz, C. (43) 143)

Difluoromethylornithine
Naegleria fowleri; *Acanthamoeba culbertsoni*; Sinefungin; (Drug sensitivity) (Ferrante, A. (40) 67)

Dihydroacetone kinase
Schizosaccharomyces pombe; Glycerol catabolism; Glycerol dehydrogenase; (Mutant) (Kong, Y.-C. (43) 71)

Dihydrolipoamide acetyltransferase
Chloramphenicol acetyltransferase; Pyruvate dehydrogenase complex (Guest, J.R. (44) 417)

Dihydroxyacetone kinase
Methylotrophic yeast; Glycerol dehydrogenase; Glycerol kinase (Tani, Y. (40) 151)

2,2′-Dipyridyl
Superoxide dismutase; Oxygen; Paraquat; (8 Prokaryotes) (Schiavone, J.R. (42) 33)

Direct repeat sequence
Mercury; Methicillin; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Discontinuous density gradient centrifugation
Epithelium (Tannock, G.W. (45) 329)

Disinfection
Virus; Chlorine dioxide; Ozone; Peracetic acid; Effluent (Harakeh, S. (44) 335)

Dispersed genes
Crithidia fasciculata; Alpha-tubulin; Beta-tubulin (Tittawella, I. (43) 317)

DNA, chloroplast
Photosynthetic mutants; DNA, mitochondrial; *Chlamydomonas* (Rochaix, J.-D. (46) 13)

DNA–DNA blot hybridization
Campylobacter pyloridis; Immunoblot; (Relatedness between species) (Von Wulffen, H. (42) 129)

DNA–DNA hybridization
Tetracycline resistance; *Campylobacter coli*; nucleotide sequence; gene dissemination (Sougakoff, W. (44) 153)

DNA homology
Erwinia chrysanthemi; Endoglucanase; Gene cloning (Boyer, M.-H. (41) 351)

DNA, mitochondrial
Photosynthetic mutants; DNA, chloroplast; *Chlamydomonas* (Rochaix, J.-D. (46) 13)

DNA modification
Nostoc commune; Immobilized cell; Water stress (Stulp, B.K. (41) 241)

DNA probe
Proteus sp.; Enterobacteriaceae; Identification; rRNA (Haun, G. (43) 187)

Staphylococcus aureus; Nuclease gene (Liebl, W. (44) 179)

DNA rearrangement
Recombination; Transposable element IS1; Bacteriophage P1; Lactose aperon; *Escherichia coli* (Iida, S. (43) 107)

Cointegration; Deletion; R plasmid; Bacteriophage P1; Transposable element IS1 (Iida, S. (43) 111)

Deletion; Inversion; Transposable element IS1; Recombination; R plasmid; Bacteriophage P1 (Iida, S. (43) 117)

DNA recombination
Bacillus stearothermophilus; Plasmid; Plasmid integration; Plasmid excision (Min, Z. (44) 77)

DNA replication
Genome organization; Eukaryotic vector; Cell cycle dependence; Viral helper function; Oncolysis (Siegl, G. (46) 433)

DNase-plate assay
DNases; corynebacteria; *Bacillus subtilis*; SDS-polyacrylamide gels (Rama, J.M. (44) 343)

DNA sequence
Penicillium funiculosum; (Genomic distribution; Repeated and single copy sequences) (Sahasrabudhe, N.A. (40) 315)

DNA sequence, repeated
Bordetella sp.; (Phase variants) (McPheat, W.L. (41) 357)

DNases
corynebacteria; *Bacillus subtilis*; SDS-polyacrylamide gels; DNase-plate assay (Rama, J.M. (44) 343)

Drug sensitivity
Campylobacter pyloridis; Gastritis; Gastroduodenal ulcers; H_2 antagonists (Morgan, D.R. (42) 245)

Elt membranes
Chlamydiae; Haemagglutination; Octylglucoside extract (Chong, K.L. (44) 225)

Ecology
Rhizobium meliloti; Genetic diversity; (Competitive dominance) (Broughton, W.J. (40) 245)

Lignin degradation; Cellulases; Xylanases; Bioconversion; Saccharification (McCarthy, A.J. (46) 145)

Edema disease
Escherichia coli; Shiga-like toxin; Verotoxin; (Pig) (Marques, L.R.M. (44) 33)

Effect of glutamate
Citrate lyase regulation; Acetylation/deacetylation; Phosphorylation/dephosphorylation (Antranikian, G. (46) 175)

Effluent
Disinfection; Virus; Chlorine dioxide; Ozone; Peracetic acid (Harakeh, S. (44) 335)

Electron microscopy
Microbial mat; Cyanobacterium; Purple sulphur bacterium; Green sulphur bacterium; Ultrastructure; Pigment analysis; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Electron transfer protein
Sulphate-reducing bacterium; Amino-terminal sequence; Signal peptide (LeGall, J. (46) 35)

Electron transport
Nitrogenase; (Bioenergetics) (Haaker, H. (46) 57)

Cytochrome *c* oxidase; Haem aa_3 (Ludwig, B. (46) 41)

Electroporation
Streptomyces lividans; Plasmid transformation (MacNeil, D.J. (42) 239)

Lactobacillus casei; Transformation (Chassy, B.M. (44) 173)

Elementary body
Chlamydia trachomatis; Reticulate body; Outer membrane protein; (Immunoblotting, Monoclonal antibody) (Cevenini, R. (42) 47)

ELISA
Aeromonas hydrophila; Haemolysin (Kozaki, S. (41) 147)

Botulinum toxin; Botulism; Diagnosis; (Chicken serum) (Sakaguchi, G. (43) 355)

Elongation Factor 1
Aminoacyl transfer rna; Ribosome; Shiga-like toxin; *Escherichia coli*; Shiga toxin (Igarashi, K. (44) 91)

Endogenous pyrogen
Fever; Influenza virus; Virulence; (Ferret) (Tinsley, C.M. (42) 103)

Endoglucanase
Erwinia chrysanthemi; Gene cloning; DNA homology (Boyer, M.-H. (41) 351)

δ-Endotoxin gene
Bacillus thuringiensis; (DNA homology); (Plasmid) (Earp, D.J. (42) 195)

Energy charge
Cellulomonas sp.; Glycogen; Trehalose; Viability; Starvation (Schimz, K.-L. (40) 333)

Enrichment
Halobacteroides halobius (Oren, A. (42) 201)

Enterobacter aerogenes
Uracil dehydrogenase; Uracil; Barbiturase; (Oxidative catabolism) (Patel, B.N. (40) 33)

Enterobacteriaceae
Proteus sp.; Identification; rRNA; DNA probe (Haun, G. (43) 187)

Gram-negative bacterium; Hospital isolate; Aerobactin (Martinez, J.L. (43) 351)

Voges–Proskauer; Anthrone; Chromogen (Yeoman, P. (44) 299)

Enterobactin
Klebsiella; Iron; Aerobactin; Outer membrane proteins (Williams, P. (44) 407)

***Enterococcus* sp.**
Streptococcus sp.; *Lactobacillus* sp.; Bacteriocin; (Growth inhibition) (James, S.M. (41) 321)

Mutans streptococci; haematin (James, S.M. (44) 95)

Enterotoxin
Escherichia coli; Verocytotoxin; Cytotoxin; (Vero cell purification) (Petric, M. (41) 63)

Cytotoxin; *Escherichia coli*; Cytolethal distending toxin; (CHO cell) (Johnson, W.M. (43) 19)

Enzyme activation
L(+)-Lactate dehydrogenase; *Clostridium acetobutylicum*; Fructose 1,6-bisphosphate (Freier, D. (43) 227)

Enzyme oxidation
Isocitrate lyase; *Chlorella fusca* (Henley, L.F. (44) 249)

Enzyme production
Bacterial glycerol metabolism; Glycerol determination; *Propionibacteria*; Enzyme screening (Ince, J.E. (44) 185)

Enzyme screening
Bacterial glycerol metabolism; Glycerol determination; *Propionibacteria*; Enzyme production (Ince, J.E. (44) 185)

Enzyme secretion
Protonmotive force; Valinomycin; Nigericin; *Leuconostoc mesenteroides*; Dextransucrase (Otts, D.R. (42) 179)

Epilithic metabolism
Organic carbon; (Colloidal); (Microcalorimetry); (River) (Ford, T.E. (45) 89)

Epithelium
Oesophagus; Microbial flora; (Microscopy) (Tannock, G. (45) 199)

Discontinuous density gradient centrifugation (Tannock, G.W. (45) 329)

Epoxidation
Isoprene; 1,3-Butadiene; *Nocardia* sp.; Mono-oxygenase (Van Ginkel, C.G. (45) 275)

Erwinia carotocora
recA; lexA; Pectin lyase, Carotovoricin; *recA, lexA* gene (McEvoy, J.L. (42) 205)

Erwinia chrysanthemi
Endoglucanase; Gene cloning; DNA homology (Boyer, M.-H. (41) 351)

Tn*5* mutagenesis; Pectin degradation; Polygalacturonate pathway; (*kdgR* gene) (Condemine, G. (42) 39)

Erythrocyte
Mycoplasma sp.; Motility; (Cattle; Sheep; Fish gill) (Fischer, M. (40) 321)

Escherichia coli
Outer membrane protein; Porin; (*ompC* expression; *ompB* mutant) (Luokkamäki, M. (40) 21)

Death rate; (Mutant) (Jörgensen, F. (40) 43)

Adhesion; Adhesion; Outer membrane protein; (Afrimbrial adhesin) (Forestier, C. (40) 47)

Klebsiella pneumoniae; *Serratia marcescens*; Porin; Salicylate; (Repression of porin synthesis) (Sawai, T. (40) 233)

Fimbria, type 1; Adhesion; (Human Kidney) (Virkola, R. (40) 257)

Lysine *N*-hydroxylase; Lysine *N*-acetyltransferase; Aerobactin; (Plasmid pColV) (Heydel, P. (40) 305)

Verocytotoxin; Enterotoxin; Cytotoxin; (Vero cell purification) (Petric, M. (41) 63)

Vitamin B_{12} receptor; (Gene cloning, expression) (Moir, P.D. (41) 103)

L-Asparaginase; L-Aspartase; (*fnr* gene) (Jerlström, P.G. (41) 127)

Bacillus subtilis; Bacteriophage T5; Transcription; Promoter (Melin, L. (41) 141)

Gut flora; (Chicken) (Hinton, M. (41) 169)

Lipopolysaccharide; Pulmonary surfactant; (Guinea pig) (Goto, H. (41) 199)

Polymorphonuclear leukocyte; Phagocytosis; Opsonin (Rainard, P. (41) 217)

Fimbria; (Nucleotide sequence, *sfaA* gene) (Schmoll, T. (41) 229)

Plasmid RP4; Transposition; Tellurite resistance (Bradley, D.E. (41) 237)

RecA protein; SOS-response; 4-Quinolone; (*recA*::*lac* fusion) (Piddock, L.J.V. (41) 289)

Iron; Pyelonephritis; Virulence factor; (Rat) (Sharma, S. (41) 295)

Temperature; ATP pool; Adenylate energy charge (Kahru, A. (41) 305)

Hydrophobicity; Cell surface; Adhesion factor; Fimbria; Antigen (McConnell, M.M. (42) 59)

β-Lactam antibiotics; Murein biosynthesis; Peptidoglycan; Penicillin-binding protein (Pisabarro, A.G. (42) 81)

Cell volume; Plasmid transformation; Transformation efficiency (Saunders, J.R. (42) 125)

Colicin A; Cell lysis; Autolysis; Colicin release (Howard, S.P. (42) 147)

Pseudomonas aeruginosa; Gene expression; Consensus promoter; Beta galactosidase; Δ^1-pyrroline 5-carboxylate reductase (Soldati, L. (42) 163)

Vero cytotoxin; VT gene; *Shigella* sp. (Smith, H.R. (42) 173)

Plasmid segregation; (Defective mutant); (Abnormal morphology) (Derbyshire, P. (42) 191)

Gene fusion; Anaerobiosis; Thiamine, Gene expression; Leucine; Isoleucine; Valine; (Biosynthetic gene) (Reams, S.G. (42) 231)

Fimbriae; (987P fimbrial subunit; Nucleotide sequence) (De Graaf, F.K. (42) 253)

Membrane growth; Cytochrome; Cell cycle (Scott, R.I. (43) 1)

Cytotoxin; Shiga-like toxin; Haemorrhagic colitis; Haemolytic-uraemic syndrome; (Antigenic heterogeneity) (Johnson, W.M. (43) 15)

Cytotoxin; Enterotoxin; Cytolethal distending toxin; (CHO cell) (Johnson, W.M. (43) 19)

TraT protein; Virulence plasmid; *Salmonella typhimurium* (Sukupolvi, S. (43) 75)

Serum resistance; *Salmonella typhimurium*; Outer membrane permeability, TraT protein (Sukupolvi, S. (43) 81)

S-Adenosylmethionine; (Biosynthesis; Mutant (Kimchi, B. (43) 101)

DNA rearrangement; Recombination; Transposable element IS1; Bacteriophage P1; Lactose aperon (Iida, S. (43) 107)

Resistance plasmid; Formaldehyde (Kaulfers, P.-M. (43) 161)

Osmotic adaptation; K^+ transport; $^{86}Rb^+$ transport; Bacteriophage infection (Alatossava, T. (43) 177)

Chlorate resistance; Cloning vector; Positive selection; Plasmid; (*chlB* gene) (Reiss, J. (43) 201)

Methylotrophic bacterium; Plasmid transfer; Phenotype restoration; Auxotrophic mutant (Al-Taho, N.M. (43) 235)

Heat-stable enterotoxin; Receptor; Diarrhea; (Piglet) (Saeed, A.M. (43) 247)

Shiga-like toxin; Verotoxin; Edema disease; (Pig) (Marques, L.R.M. (44) 33)

Iron transport; Ferrous iron; (Mutant) (Hantke, K. (44) 53)

Elongation Factor 1; Aminoacyl transfer rna; Ribosome; Shiga-like toxin; Shiga toxin (Igarashi, K. (44) 91)

Invasion; HeLa cell; Polyethylene glycol (Bessen, D. (44) 313)

Mannose uptake; Gene cloning (Saris, P.E.J. (44) 371)

Mannose transport; Penetration of λDNA (Saris, P.E.J. (44) 377)

Cytochrome; Haem (Gennis, R.B. (46) 387)

Escherichia coli bacteriophage
Vero toxin; Shiga-like toxin; (Cloning) (Kurazono, H. (44) 23)

***Escherichia coli* K1**
Serum sensitivity assay; Turbidimetric assay (Pelkonen, S. (42) 53)

Ethanol
Mucor rouxii; Trehalose; Glycerol; Spore germination (Van Laere, A.J. (41) 247)

Saccharomyces cerevisiae; L-Malic acid; Anaerobiosis (Salmon, J.M. (42) 213)

Clostridium acetobutylicum; Amino acid; Butanol; Acetone (Masion, E. (43) 269)

Ethanol shock
Zymomonas mobilis; Heat shock; protein synthesis (Michel, G.P.F. (43) 361)

Ethene-utilizing bacteria
Growth; Stability; Compost (Van Ginkel, C.G. (45) 65)

Ethyl sulphate
Alkyl sulphatase; Biodegradation; Butyl sulphate; Propyl sulphate; Methyl sulphate; (Bacteria) (White, G.F. (40) 173)

Eubacteria
Archaebacteria; Sulphur dependency; Methanogenicity; Eukaryotes; Thermophiles; Methanogens (Tiboni, O. (44) 203)

Eubacterium nodatum
Lipoteichoic acid; Haemagglutination; Antigen (Kokeguchi, S. (41) 13)

Eukaryotes
Archaebacteria; Sulphur dependency; Methanogenicity; Eubacteria; Thermophiles; Methanogens (Tiboni, O. (44) 203)

Eukaryotic vector
Genome organization; DNA replication; Cell cycle dependence; Viral helper function; Oncolysis (Siegl, G. (46) 433)

Evolution
Inactive genes; Cryptic gene; Pseudogene; Gene duplication (Beacham, I.R. (46) 409)

Exotoxin
Pseudomonas pseudomallei; Antibody; (Detection; Enzyme immunoassay) (Ismail, G. (40) 27)

Faecal bacterium
Gut microflora; Polysaccharide fermentation; Volatile fatty acid (Englyst, H.N. (45) 163)

Fatty acid
Trichoderma reesei; Protein secretion; Tween; Membrane fluidity (Panda, T. (41) 85)

Saccharomyces cerevisiae; Osmotolerant yeast (Tunblad-Johansson, I. (43) 275)

Mycobacteria; Gas chromatography; Mass spectrometry (Valero-Guillén, P.L. (44) 303)

Saccharopolyspora hirsuta; Taxonomy (Embley, T.M. (41) 131)

Fatty acid synthetase: *Mucor rouxii*
Yeast phase (Romero, J.A. (44) 243)

Fermentation
Saccharomyces cerevisiae; Carbon dioxide; Amino acid absorption (Slaughter, J.C. (40) 239)

Saccharomyces cerevisiae; Saccharomyces uvarum; Pasteur effect; Glycolysis; (Mass spectrometry) (Lloyd, D. (42) 27)

Anaerobic fungi; Rumen; Plant structural material; Degradation (Mountfort, D.O. (46) 401)

Fermentation end products
Cytoplasmic pH; Proton motive force; Osmotolerance; Glycine betaine; Lactic acid bacteria (Kashket, E.R. (46) 233)

Fermented milk
Flavour volatiles; Mesophilic starters; Thermophilic starters; Mixed cultures (Marshall, V.M. (46) 327)

Ferrous iron
Escherichia coli; Iron transport; (Mutant) (Hantke, K. (44) 53)

Fever
Endogenous pyrogen; Influenza virus; Virulence; (Ferret) (Tinsley, C.M. (42) 103)

Fibrils
Cell walls; Agaricus bisporus (Garcia Mendoza, C. (44) 161)

Fibrinogen
Staphylococci; Fibronectin; Clumping factor (Chhatwal, G.S. (44) 147)

Fibronectin
Staphylococci; Fibrinogen; Clumping factor (Chhatwal, G.S. (44) 147)

Filamentous bacterium
Gliding bacterium; Thermophilic bacterium; (New Zealand hot spring) (Schofield, K.M. (40) 169)

Filamentous fungus
Ceratocystis ulmi; Calmodulin; Yeast; Fungal dimorphism (Muthukumar, G. (41) 253)

Fimbria
Escherichia coli; (Nucleotide sequence, *sfaA* gene) (Schmoll, T. (41) 229)

Escherichia coli; Hydrophobicity; Cell surface; Adhesion factor; Antigen (McConnell, M.M. (42) 59)

Escherichia coli; (987P fimbrial subunit; Nucleotide sequence) (De Graaf, F.K. (42) 253)

Fimbria, type 1
Escherichia coli; Adhesion; (Human Kidney) (Virkola, R. (40) 257)

First order reaction kinetics
Growth equation; Microcultural study; Lag time; Rate of growth initiation of parent cells (Mochizuki, M. (45) 291)

Fish
Pathogenic bacterium; Antibiotic resistance pattern; (rapid determination (Austin, B. (43) 295)

Flavour volatiles
Fermented milk; Mesophilic starters; Thermophilic starters; Mixed cultures (Marshall, V.M. (46) 327)

5-Fluorocytosine
Poly (isobutyl cyanoacrylate) nanoparticles; *Candida albicans*; Amphotericin B; Miconazole (Bajwa, P.S. (44) 413)

Food preservation
Lactic acid fermentation; Lactic acid bacteria; Starter cultures; (Pickles); (Sauerkraut); (Silage) (Daeschel, M.A. (46) 357)

Lactic acid bacteria; (Fish); (Cassava); (Meat); (Tropical countries) (Cooke, R.D. (46) 369)

Formaldehyde
Resistance plasmid; *Escherichia coli* (Kaulfers, P.-M. (43) 161)

Methanosarcina barkeri; Trimethylamine; Methanogenesis; Protonmotive force (Müller, V. (43) 183)

Fructose 1,6-bisphosphate
L(+)-Lactate dehydrogenase; *Clostridium acetobutylicum*; Enzyme activation (Freier, D. (43) 227)

Functional properties
Soil bacteria; Polluted snow; Snowmelt; Acidic deposition; Community change (Thompson, I.P. (45) 269)

Fungal
Spore; Laser diffractometry; (Bacterial; Water content; size) (Ulanowski, Z. (40) 229)

Fungal dimorphism
Ceratocystis ulmi; Calmodulin; Yeast; Filamentous fungus (Muthukumar, G. (41) 253)

Furunculosis
Aeromonas salmonicida; (Uptake by rainbow trout) (Hodgkinson, J.L. (40) 207)

Fusidic acid
Rhodococcus erythropolis; Antibiotic resistance; (Antibiotic inactivation) (Dabbs, E.R. (40) 135)

Futile cycle
Glycolysis; Pyruvate kinase; Inducer exclusion-expulsion;

Phosphoenolpyruvate-dependent sugar:phosphotransferase system (Thompson, J. (46) 221)

Gas chromatography
Mycobacteria; Fatty acid; Mass spectrometry (Valero-Guillén, P.L. (44) 303)

Gastritis
Campylobacter pyloridis; Drug sensitivity; Gastroduodenal ulcers; H_2 antagonists (Morgan, D.R. (42) 245)

Gastroduodenal ulcers
Campylobacter pyloridis; Drug sensitivity; Gastritis; H_2 antagonists (Morgan, D.R. (42) 245)

Gas vesicle
Microcystis aeruginosa; Buoyancy; Chemostat; Phosphate limitation (Konopka, A. (45) 135)

Gene cloning
Transformation; Plasmid; *Streptococcus pneumoniae*; Alkaline phosphatase (Pozzi, G. (41) 309)

Erwinia chrysanthemi; Endoglucanase; DNA homology (Boyer, M.-H. (41) 351)

Gene enrichment; Chromosomal transformation; *Streptococcus pneumoniae* (Pérez Ureña, M.T. (42) 153)

Streptococcus lactis; (Tn*916*) (Dos Santos, A.L.L. (42) 209)

Mannose uptake; *Escherichia coli* (Saris, P.E.J. (44) 371)

Recombinant DNA; Plasmid vector; Gene expression; Lactic streptococcus (De Vos, W.M. (46) 281)

Gene dissemination
Tetracycline resistance; *Campylobacter coli*; nucleotide sequence; DNA–DNA hybridization (Sougakoff, W. (44) 153)

Gene duplication
Toluene oxidation; *Pseudomonas putida*; Isoenzymes (Jenkins, R.O. (44) 209)

Inactive genes; Cryptic gene; Pseudogene; Evolution (Beacham, I.R. (46) 409)

Gene enrichment
Gene cloning; Chromosomal transformation; *Streptococcus pneumoniae* (Pérez Ureña, M.T. (42) 153)

Gene expression
Pseudomonas aeruginosa; *Escherichia coli*; Consensus promoter; Beta galactosidase; Δ^1-pyrroline 5-carboxylate reductase (Soldati, L. (42) 163)

Promoter mutation; *Salmonella typhimurium*; Aerobic growth; Anaerobiosis (Yamamoto, N. (42) 249)

Adenovirus; *n*-Butyric acid (Fernández-Puentes, C. (44) 69)

Recombinant DNA; Plasmid vector; Gene cloning; Lactic streptococcus (De Vos, W.M. (46) 281)

Gene fusion
Anaerobiosis; Thiamine, Gene expression; Leucine; Isoleucine; Valine; *Escherichia coli*; (Biosynthetic gene) (Reams, S.G. (42) 231)

Gene library
Mycobacterium bovis; Biotinylated protein; Protein synthesis; Streptavidin (Collins, M.E. (43) 53)

Gene mapping
Pseudomonas aeruginosa; Protein export; (Mutant) (Filloux, A. (40) 159)

Genetic diversity
Rhizobium meliloti; Ecology; (Competitive dominance) (Broughton, W.J. (40) 245)

Genetic engineering
Lactic acid bacteria; Starter culture; Plasmid; Conjugation; Transformation; Transduction (Sandine, W.E. (46) 205)

Plasmid; *Lactobacillus* sp.; Transformation; Transfection; Liposome; Conjugation; Protoplast fusion (Chassy, B.M. (46) 297)

Genetic transfer
Restriction and modification; Phage adsorption; Conjugation; Phage-insensitive starters (Klaenhammer, T.R. (46) 313)

Genome organization
Eukaryotic vector; DNA replication; Cell cycle dependence; Viral helper function; Oncolysis (Siegl, G. (46) 433)

Gibbs free energy
H_2 partial pressure; H_2 turnover; Activation energy; H_2-dependent methanogenesis; Methanogenic community (Conrad, R. (45) 281)

Gliding bacterium
Filamentous bacterium; Thermophilic bacterium; (New Zealand hot spring) (Schofield, K.M. (40) 169)

Glucan
Saccharomyces cerevisiae; Cell walls; Glucosaminoglycan (Mol, P.C. (41) 95)

Streptococcus mutans; Adherence, cell; Glucosyltransferase (Takehara, T. (42) 13)

Glucocerebroside
Sporothrix schenckii (Cardoso, D.B.S. (43) 279)

Glucosaminoglycan
Saccharomyces cerevisiae; Cell walls; Glucan (Mol, P.C. (41) 95)

Glucose
Selenomonas ruminantium; Lactate racemase; D-Lactate; (Glucose metabolism) (Melville, S.B. (40) 289)

Glucose dehydrogenase
Acinetobacter calcoaceticus; Quinoprotein; (Substrate specificity) (Dokter, P. (43) 195)

Glucose transport
Saccharomyces cerevisiae; Sporulation; (Transport inactivation) (Cid, A. (41) 59)

Glucosylglycerol
Cyanobacteria; Microbial mat; Osmotic adjustment; Carbohydrates; Trehalose; Sucrose (Stal, L.J. (45) 305)

Glucosyltransferase
Streptococcus mutans; Adherence, cell; Glucan (Takehara, T. (42) 13)

endo-β(1,4)-D-Glucuronidase
Mucor rouxii; Mucoric acid; Lysis (Dow, J.M. (41) 91)

Glutamate dehydrogenase
Hyphomicrobium sp.; Glutamine synthetase; Glutamate synthase (Brooke, A.G. (41) 41)

Glutamine synthetase; *Coprinus cinereus*; Ammonium (Moore, D. (44) 239)

Glutamate synthase
Hyphomicrobium sp.; Glutamate dehydrogenase; Glutamine synthetase (Brooke, A.G. (41) 41)

Glutamine
Methanobacterium thermoautotrophicum; Pyroglutamate; Ammonia assimilation; (Ammonia formation) (Friedmann, H.C. (40) 179)

Glutamine synthetase
Rhodobacter capsulatus; (Sulphydryl group) (Caballero, F.J. (41) 7)

Hyphomicrobium sp.; Glutamate dehydrogenase; Glutamate synthase (Brooke, A.G. (41) 41)

Photosynthetic bacterium; *Rhodobacter capsulatus*; (Immunological comparison) (Abril, N. (43) 89)

Glutamate dehydrogenase; *Coprinus cinereus*; Ammonium (Moore, D. (44) 239)

Glycerol
Mucor rouxii; Trehalose; Ethanol; Spore germination (Van Laere, A.J. (41) 247)

Glycerol catabolism
Schizosaccharomyces pombe; Glycerol dehydrogenase; Dihydroacetone kinase; (Mutant) (Kong, Y.-C. (43) 71)

Glycerol dehydrogenase
Methylotrophic yeast; Dihydroxyacetone kinase; Glycerol kinase (Tani, Y. (40) 151)

Schizosaccharomyces pombe; Glycerol catabolism; Dihydroacetone kinase; (Mutant) (Kong, Y.-C. (43) 71)

Glycerol determination
Bacterial glycerol metabolism; *Propionibacteria*; Enzyme production; Enzyme screening (Ince, J.E. (44) 185)

Glycerol kinase
Methylotrophic yeast; Glycerol dehydrogenase; Dihydroxyacetone kinase (Tani, Y. (40) 151)

Glycine
Alanine; Stickland reaction; Metabolism; *Clostridium sporogenes*; Syntrophism; Interspecies H_2 transfer; Methanogenic bacterium (Winter, J. (45) 153)

Glycine betaine
Cytoplasmic pH; Fermentation end products; Proton motive force; Osmotolerance; Lactic acid bacteria (Kashket, E.R. (46) 233)

Glycogen
Cellulomonas sp.; (Accumulation; Degradation) (Schimz, K.-L. (40) 325)

Cellulomonas sp.; Trehalose; Viability; Energy charge; Starvation (Schimz, K.-L. (40) 333)

Glycogen formation
Growth; *Saccharomyces cerevisiae* (Rocha-Leão, M.H.M. (44) 423)

Glycolysis
Saccharomyces cerevisiae; Saccharomyces uvarum; Pasteur effect; Fermentation; (Mass spectrometry) (Lloyd, D. (42) 27)

Futile cycle; Pyruvate kinase; Inducer exclusion-expulsion; Phosphoenolpyruvate-dependent sugar:phosphotransferase system (Thompson, J. (46) 221)

Glycomyces
Menaquinone; Vitamin K; Lipids (Collins, M.D. (44) 215)

Gradient plate, gel-stabilised
Cultivation method; Microorganism; (Response to environment) (Wimpenny, J. (40) 263)

Gram-negative bacterium
Hospital isolate; Aerobactin; Enterobacteriaceae (Martinez, J.L. (43) 351)

Green sulphur bacterium
Microbial mat; Cyanobacterium; Purple sulphur bacterium; Ultrastructure; Pigment analysis; Electron microscopy; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Bacteriochlorophyll; Anoxygenic photosynthesis; Purple sulphur bacterium; Cyanobacterium (Pierson, B. (45) 365)

Group A streptococci
Streptococcal pyrogenic exotoxin; SPE-A; SPE-B; SPE-C; SPE-D; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

Growth
Glycogen formation; *Saccharomyces cerevisiae* (Rocha-Leão, M.H.M. (44) 423)

Ethene-utilizing bacteria; Stability; Compost (Van Ginkel, C.G. (45) 65)

Saturation constant; Affinity constant (Owens, J.D. (46) 419)

Growth equation
First order reaction kinetics; Microcultural study; Lag time; Raté of growth initiation of parent cells (Mochizuki, M. (45) 291)

Gut flora
Escherichia coli; (Chicken) (Hinton, M. (41) 169)

Gut microflora
Polysaccharide fermentation; Volatile fatty acid; Faecal bacterium (Englyst, H.N. (45) 163)

pH
Bacillus acidocaldarius; Proton conductance (Guffanti, A.A. (41) 275)

Haem
Cytochrome; *Escherichia coli* (Gennis, R.B. (46) 387)

Haem aa_3
Cytochrome *c* oxidase; Electron transport, bacterial (Ludwig, B. (46) 41)

Haemagglutination
Eubacterium nodatum; Lipoteichoic acid; Antigen (Kokeguchi, S. (41) 13)

Vibrio cholerae: Fibronectin binding; Mannose (Wiersma, E.J. (44) 365)

Chlamydiae; EB membranes; Octylglucoside extract (Chong, K.L. (44) 225)

Haemagglutinin
Sendai virus; HN glycoprotein; Neuraminidase; (Antigenic determinant; Monoclonal antibody) (Sugii, S. (40) 129)

Haematin
Mutans streptococci; *Enterococcus* sp. (James, S.M. (44) 95)

Haemolysin
Aeromonas hydrophila; ELISA (Kozaki, S. (41) 147)

Antiserum; *Vibrio vulnificus*; Immunization; (Liposomes) (Yamanaka, H. (41) 313)

Vibrio vulnificus; Liposome membranes (Yamanaka, H. (44) 253)

Haemolytic-uraemic syndrome
Cytotoxin; Shiga-like toxin; Haemorrhagic colitis; *Escherichia coli*; (Antigenic heterogeneity) (Johnson, W.M. (43) 15)

Haemophilus ducreyi
Lipopolysaccharide (Abeck, D. (42) 159)

Surface protein; Outer-membrane protein (Abeck, D. (44) 49)

Haemorrhagic alveolitis
Bordetella pertussis; Monoclonal antibody; Passive protection; Adenylate cyclase; Pertussis toxini (Mouse) (Brézin, C. (42) 75)

Haemorrhagic colitis
Cytotoxin; Shiga-like toxin; Haemolytic-uraemic syndrome; *Escherichia coli*; (Antigenic heterogeneity) (Johnson, W.M. (43) 15)

Halobacterium cutirubrum
Polyamine; Agmatine; Amino acid decarboxylation (Kamekura, M. (43) 301)

Halobacteroides halobius
Enrichment (Oren, A. (42) 201)

H_2 antagonists
Campylobacter pyloridis; Drug sensitivity; Gastritis; Gastroduodenal ulcers (Morgan, D.R. (42) 245)

H.8 antigen
Azurin; Lipoprotein; *Neisseria gonorrhoeae* (Gotschlich, E.C. (43) 253)

H_2-competition
Interspecies H_2 transfer; Syntrophic associations; In situ H_2 concentrations; Seasonal changes (Conrad, R. (45) 107)

H_2-dependent methanogenesis
H_2 partial pressure; H_2 turnover; Activation energy; Gibbs free energy; Methanogenic community (Conrad, R. (45) 281)

Heat-resistant spore
Persistence; Mortality of larva (Paily, K.P. (45) 313)

Heat shock
Zymomonas mobilis; Ethanol shock; protein synthesis (Michel, G.P.F. (43) 361)

Heat-shock protein
Bacillus subtilis; (localization) (Qoronfleh, M.W. (43) 373)

Heat-stable enterotoxin
Escherichia coli; Receptor; Diarrhea; (Piglet) (Saeed, A.M. (43) 247)

Heavy metals
Aureobasidium pullulans; Protoplasts (Gadd, G.M. (45) 261)

HeLa cell
Escherichia coli; Invasion; Polyethylene glycol (Bessen, D. (44) 313)

HeLa cell invasion
Salmonella typhimurium; Calcium; Virulence (Niesel, D.W. (41) 299)

Heliobacillus mobilis
Bacteriochlorophyll *g*; Nitrogen fixation; (Rice paddy ecology) (Beer-Romero, P. (4) 109)

Heterocyst
Anabaena sp.; Nitrogenase; (Heterocystless mutant) (Spence, D.W. (40) 119)

Heterologous gene expression
Prime plasmid; *Methylophilus methylotrophus*; Complementation; Plasmid transfer (Kearney, P. (44) 7)

Heterotrophic activity
Parameter estimation; Water; Sediment (Choquet, C.G. (45) 59)

H_2 in lake water
H_2 turnover; Methanogenesis; Acetogenesis; Thermodynamics; H_2 syntrophy (Conrad, R. (45) 243)

Histamine
Vibrio vulnificus; Protease; (Vascular permeability enhancement) (Miyoshi, S.-i. (40) 95)

HN glycoprotein
Sendai virus; Haemagglutinin; Neuraminidase; (Antigenic determinant; Monoclonal antibody) (Sugii, S. (40) 129)

Hospital isolate
Gram-negative bacterium; Aerobactin; Enterobacteriaceae (Martinez, J.L. (43) 351)

H_2 partial pressure
H_2 turnover; Activation energy; Gibbs free energy; H_2-dependent methanogenesis; Methanogenic community (Conrad, R. (45) 281)

H_2 syntrophy
H_2 turnover; Methanogenesis; Acetogenesis; Thermodynamics; H_2 in lake water (Conrad, R. (45) 243)

H_2 turnover
Methanogenesis; Acetogenesis; Thermodynamics; H_2 syntrophy; H_2 in lake water (Conrad, R. (45) 243)

H_2 partial pressure; Activation energy; Gibbs free energy; H_2-dependent methanogenesis; Methanogenic community (Conrad, R. (45) 281)

Hydrogenase
Methanosarcina barkeri; Methanogenesis; Carbon monoxide dehydrogenase (Bhatnagar, L. (41) 337)

Hydrogen cycling
Desulfovibrio vulgaris; Mass spectrometry (Peck, Jr., H.D. (40) 295)

Hydrogen evolution
Microbial activity; Anaerobic settlement; Tetrazolium salt (Oren, A. (45) 127)

Hydrogen formation
Methanosarcina barkeri; Methanogenesis; Acetate (Krzycki, J.A. (40) 193)

Hydrogen metabolism
Nitrogen fixation; (Energy costs) (Stam, H. (46) 73)

Hydrogen peroxide
Anthocyanin; Oxidation; *Streptococcus durans*; Malvin; Biodegradation (Pérez, J. (43) 33)

Protein degradation; Oxidized proteins; Oxidative stress (Klemes, Y. (44) 277)

Hydrophilic substrata
Polyethylene glycol (PEG) graft copolymers; Anti-adhesive compounds (Humphries, M. (45) 297)

Hydrophobicity
Streptococcus salivarius; Cell surface; Adhesion; Surface free energy (Van der Mei, H.C. (40) 15)

Streptococcus mutans; Saliva; Agglutinin (Rundegren, J. (40) 141)

Escherichia coli; Cell surface; Adhesion factor; Fimbria; Antigen (McConnell, M.M. (42) 59)

Surface free energy; Zeta potential; Oral Streptococci; Bacterial adhesion (Busscher, H.J. (46) 165)

Hydroxamate
Siderophore; Lysine decarboxylase; Iron; *Streptomyces pilosus*; Desferrioxamine B (Schupp, T. (42) 135)

D-2-Hydroxyisocaproate dehydrogenase
Lactobacillus casei; Subunit structure; (N-terminal sequence) (Kallwass, H. (43) 263)

Hydroxyl radical
Arthrobacter sp.; (Humic acid clearing) (Blondeau, R. (41) 263)

Hyphae
Sordaria brevicollis; Septal pore plugging; Cell nucleus; (Microscopy) (Collinge, A.J. (44) 85)

Hyphal damage
Penicillium chrysogenum; Woronin body; Septal pore; (Electron microscopy) (Collinge, A.J. (40) 165)

***Hyphomicrobium* sp.**
Glutamate dehydrogenase; Glutamine synthetase; Glutamate synthase (Brooke, A.G. (41) 41)

Identification
Proteus sp.; Enterobacteriaceae; rRNA; DNA probe (Haun, G. (43) 187)

Campylobacter sp.; (Southern hybridization); (16S rRNA genes) (Romaniuk, P.J. (43) 331)

Immobilized cell
Nostoc commune; DNA modification; Water stress (Stulp, B.K. (41) 241)

Immunization
Antiserum; *Vibrio vulnificus*; Haemolysin; (Liposomes) (Yamanaka, H. (41) 313)

Pseudomonas lectin; *Pseudomonas aeruginosa*; Vaccine (Sudakevitz, D. (43) 313)

Immunoblot
Campylobacter pyloridis; DNA–DNA blot hybridization; (Relatedness between species) (Von Wulffen, H. (42) 129)

Bordetella pertussis; Pertussis toxin; Monoclonal antibody (Anwar, H. (44) 141)

Inactive genes
Cryptic gene; Pseudogene; Gene duplication; Evolution (Beacham, I.R. (46) 409)

Inducer exclusion-expulsion
Glycolysis; Futile cycle; Pyruvate kinase; Phosphoenolpyruvate-dependent sugar:phosphotransferase system (Thompson, J. (46) 221)

Infection
Vibrio cholerae; (Experimental wound infection) (Simpson, L.M. (40) 89)

Bordetella pertussis; Respiratory infection; (Mouse) (Alonso, J.M. (40) 273)

Influenza virus
Endogenous pyrogen; Fever; Virulence; (Ferret) (Tinsley, C.M. (42) 103)

Inoculation
Rhizobium sp.; Competition; Soil; (Mung bean) (Rangarajan, M. (45) 85)

Inoculation study
Biodegradation; Xenobiotic compound; *Pseudomonas* sp. strain P51; River water (Van der Meer, J.R. (45) 333)

Insertion sequence
Direct repeat sequence; Mercury; Methicillin; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids (Gillespie, M.T. (43) 165)

In situ H_2 concentrations
H_2-competition; Interspecies H_2 transfer; Syntrophic associations; Seasonal changes (Conrad, R. (45) 107)

Integrational plasmid
Bacillus subtilis; Conjugal plasmid transfer; Conjugal mobilization; *Clostridium acetobutylicum*; Plasmid (Oultram, J.D. (42) 113)

Interspecies H_2 transfer
H_2-competition; Syntrophic associations; In situ H_2 concentrations; Seasonal changes (Conrad, R. (45) 107)

Alanine; Glycine; Stickland reaction; Metabolism; *Clostridium sporogenes*; Syntrophism; Methanogenic bacterium (Winter, J. (45) 153)

Invasion
Escherichia coli; HeLa cell; Polyethylene glycol (Bessen, D. (44) 313)

Inversion
DNA rearrangement; Deletion; Transposable element IS1; Recombination; R plasmid; Bacteriophage P1 (Iida, S. (43) 117)

In vivo DNA methylation
Restriction endonuclease; Restriction-modification systems; *Neisseria* (Sullivan, K.M. (44) 389)

Iron
Vibrio vulnificus; Virulence (Morris Jr.., J.G. (40) 55)

Thiobacillus ferrooxidans; Sulphur oxidation (Corbett, C.M. (41) 1)

Azotobacter vinelandii; Transformation; Competence; Siderophore (Page, W.J. (41) 257)

Escherichia coli; Pyelonephritis; Virulence factor; (Rat) (Sharma, S. (41) 295)

Siderophore; Hydroxamate; Lysine decarboxylase; *Streptomyces pilosus*; Desferrioxamine B (Schupp, T. (42) 135)

Klebsiella; Enterobactin; Aerobactin; Outer membrane proteins (Williams, P. (44) 407)

Iron transport
Escherichia coli; Ferrous iron; (Mutant) (Hantke, K. (44) 53)

Isocitrate lyase
Chlorella fusca; Enzyme oxidation (Henley, L.F. (44) 249)

Isoenzymes
Toluene oxidation; *Pseudomonas putida*; Gene duplication (Jenkins, R.O. (44) 209)

Isoleucine
Gene fusion; Anaerobiosis; Thiamine, Gene expression; Leucine; Valine; *Escherichia coli*; (Biosynthetic gene) (Reams, S.G. (42) 231)

Isoprene
1,3-Butadiene; *Nocardia* sp.; Mono-oxygenase; Epoxidation (Van Ginkel, C.G. (45) 275)

Isoprenoid quinone
Nocardia brasiliensis; Vitamin K_2; Menaquinone; (structure) (Collins, M.D. (41) 35)

Isoprenoid quinones
Classification; Polar lipids; *Leptospiraceae* (Embley, T.M. (44) 273)

Kanamycin
Bacillus anthracis; Transformation; Resistance plasmid (Makino, S.-i. (44) 45)

Kefir
Lactic acid bacteria; Yoghurt; Cultured buttermilk; Lactose digestion; Protein quality; Vitamin (Gurr, M.I. (46) 337)

Klebsiella
Iron; Enterobactin; Aerobactin; Outer membrane proteins (Williams, P. (44) 407)

Klebsiella pneumoniae
Escherichia coli; Serratia marcescens; Porin; Salicylate; (Repression of porin synthesis) (Sawai, T. (40) 233)

Lipopolysaccharide; Bacteriophage receptor (Tomás, J.M. (41) 223)

β-Lactamase; Plasmid pUK702 (Reid,, A.J. (44) 125)

K^+ transport
Osmotic adaptation; $^{86}Rb^+$ transport; *Escherichia coli*; Bacteriophage infection (Alatossava, T. (43) 177)

***Laccaria* sp.**
Lactarius sp.; Bacterium; Polysaccharide; (Bacteria from fungal material) (Chard, J.M. (40) 345)

β-Lactam antibiotics
Escherichia coli; Murein biosynthesis; Peptidoglycan; Penicillin-binding protein (Pisabarro, A.G. (42) 81)

β-Lactamase
Myxococcus xanthus; Acid phosphatase; (*Escherichia coli* enzymes) (Breton, A.M. (40) 183)

Klebsiella pneumoniae; Plasmid pUK702 (Reid,, A.J. (44) 125)

***Lactarius* sp.**
Laccaria sp.; Bacterium; Polysaccharide; (Bacteria from fungal material) (Chard, J.M. (40) 345)

D-Lactate
Selenomonas ruminantium; Lactate racemase; Glucose; (Glucose metabolism) (Melville, S.B. (40) 289)

L(+)-Lactate dehydrogenase
Clostridium acetobutylicum; Enzyme activation; Fructose 1,6-bisphosphate (Freier, D. (43) 227)

Lactate racemase
Selenomonas ruminantium; D-Lactate; Glucose; (Glucose metabolism) (Melville, S.B. (40) 289)

Lactic acid bacteria
Taxonomy (Schleifer, K.H. (46) 201)

Starter culture; Plasmid; Genetic engineering; Conjugation; Transformation; Transduction (Sandine, W.E. (46) 205)

Cytoplasmic pH; Fermentation end products; Proton motive force; Osmotolerance; Glycine betaine (Kashket, E.R. (46) 233)

Oxygen (Condon, S. (46) 269)

Yoghurt; Kefir; Cultured buttermilk; Lactose digestion; Protein quality; Vitamin (Gurr, M.I. (46) 337)

Food preservation; Lactic acid fermentation; Starter cultures; (Pickles); (Sauerkraut); (Silage) (Daeschel, M.A. (46) 357)

Food preservation; (Fish); (Cassava); (Meat); (Tropical countries) (Cooke, R.D. (46) 369)

Lactic acid fermentation
Food preservation; Lactic acid bacteria; Starter cultures; (Pickles); (Sauerkraut); (Silage) (Daeschel, M.A. (46) 357)

Lactic streptococcus
Recombinant DNA; Plasmid vector; Gene cloning; Gene expression (De Vos, W.M. (46) 281)

Lactobacillus casei
D-2-Hydroxyisocaproate dehydrogenase; Subunit structure; (N-terminal sequence) (Kallwass, H. (43) 263)

Transformation; Electroporation (Chassy, B.M. (44) 173)

***Lactobacillus* sp.**
Streptococcus sp.; *Enterococcus* sp.; Bacteriocin; (Growth inhibition) (James, S.M. (41) 321)

Plasmid; Transformation; Transfection; Liposome; Conjugation; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Antimicrobial activity; Protection against disease; Anticholesteremic factor; Anticarcinogenic activity; Dairy product (Fernandes, C.F. (46) 343)

Lactose aperon
DNA rearrangement; Recombination; Transposable element IS1; Bacteriophage P1; *Escherichia coli* (Iida, S. (43) 107)

Lactose digestion
Lactic acid bacteria; Yoghurt; Kefir; Cultured buttermilk; Protein quality; Vitamin (Gurr, M.I. (46) 337)

Lag time
Growth equation; First order reaction kinetics; Microcultural study; Rate of growth initiation of parent cells (Mochizuki, M. (45) 291)

Lake
Caulobacter sp.; Bacterial enumeration; (Mesotrophic lake) (Staley, J.T. (45) 1)

Metallogenium sp.; Manganese oxidation (Maki, J.S. (45) 21)

Laser diffractometry
Spore; (Bacterial; Fungal; Water content; size) (Ulanowski, Z. (40) 229)

Legionella pneumophila
3-Deoxy-D-manno-2-octulosonic acid; (Gas chromatography) (Guerrant, G.O. (42) 1)

Leprosy skin biopsies
Phthiocerol dimycocerosate, PDIM; Phenolic glycolipid, PGL-I; Phosphatidyl inositol mannoside, PIM; Mycolates (Venkatesan, K. (44) 167)

Leptospiraceae
Classification; Isoprenoid quinones; Polar lipids (Embley, T.M. (44) 273)

Leucine
Gene fusion; Anaerobiosis; Thiamine, Gene expression; Isoleucine; Valine; *Escherichia coli*; (Biosynthetic gene) (Reams, S.G. (42) 231)

Leuconostoc mesenteroides
Protonmotive force; Valinomycin; Nigericin; Dextransucrase; Enzyme secretion (Otts, D.R. (42) 179)

Leuconostoc oenos
Bacteriophage; (Isolation); (Characterization) (Nel, L. (44) 63)

Leukocidin
Staphylococcus aureus; Phosphorylation; (Calcium) (Morinaga, N. (44) 431)

Leukocytes
Phagocytes; Amoeba; Bacteria; Adhesins (Lock, R. (44) 135)

Leukopoiesis
Mitotic index; Virulence plasmid; Bone-marrow cell; *Yersinia enterocolitica*; (Mouse) (Román, S.M. (43) 219)

Levansucrase
Bacillus subtilis; Sucrose; Sucrase; (Gene cloning) (Débarbouillé, M. (41) 137)

Bacillus subtilis; Regulatory gene (Martin, I. (44) 39)

lexA
Erwinia carotovora; recA; Pectin lyase, Carotovoricin; recA, lexA gene (McEvoy, J.L. (42) 205)

Light
Rhodocyclus gelatinosus; Carbon monoxide; Carbon monoxide dehydrogenase (Champine, J.E. (44) 307)

Light-dark cycle
Oscillatoria sp.; Nitrogen fixation (Stal, L.J. (45) 227)

Lignin biodegradation
Coriolus versicolor; Peroxidase; Veratryl alcohol (Dodson, P.J. (42) 17)

Lignin degradation
Ecology; Cellulases; Xylanases; Bioconversion; Saccharification (McCarthy, A.J. (46) 145)

***lig* ts mutant**
Bacteriophage Mu; (*Escherichia coli*; Killing effect) (Buu, A. (40) 111)

Limited growth
Amino acids; Starter cultures; Milk (Hugenholtz, J. (45) 191)

Linkage mapping
Agrobacterium tumefaciens; Chromosome mobilization; R prime formation; Chromosomal genes (Waelkens, F. (44) 329)

Lipid
Natronobacterium gregoryi; Vitamin K; Menaquinone (Collins, M.D. (43) 307)

Menaquinone; Vitamin K; *Glycomyces* (Collins, M.D. (44) 215)

Lipid A
Shigella sonnei; (Structure) (Bath, U.R. (40) 189)

Lipid A epitopes
Synthetic lipid A analogues; Monoclonal antibodies (Arata, S. (44) 231)

Lipopolysaccharide
Salmonella minnesota; (Monoclonal antibody; Core region) (Appelmelk, B.J. (40) 71)

Escherichia coli; Pulmonary surfactant; (Guinea pig) (Goto, H. (41) 199)

Klebsiella pneumoniae; Bacteriophage receptor (Tomás, J.M. (41) 223)

Haemophilus ducreyi (Abeck, D. (42) 159)

Bradyrhizobium; Sugar composition (Banoub, J.H. (44) 235)

Thiobacillus versutus; Thiobacillus sp.; Structure; *Rhodobacter* sp.; *Paracoccus denitrificans* (Yokota, A. (44) 197)

Pseudomonas aeruginosa; Uronic acid; Ulosonic acid (Knirel, Y.A. (46) 381)

Lipoprotein
Azurin; H.8 antigen; *Neisseria gonorrhoeae* (Gotschlich, E.C. (43) 253)

Liposome
Plasmid; *Lactobacillus* sp.; Transformation; Transfection; Conjugation; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Liposome membranes
Vibrio vulnificus; Haemolysin (Yamanaka, H. (44) 253)

Lipoteichoic acid
Staphylococcus aureus; Norfloxacin; Lysis, bacterial (Miyake, Y. (40) 301)

Eubacterium nodatum; Haemagglutination; Antigen (Kokeguchi, S. (41) 13)

Low-nutrient bacteria
Oligotrophic marine bacteria; Marine interfaces; Bioassay (Carlucci, A.F. (45) 211)

Low nutrient salt medium
Trap formation; Morphogenesis; Attractant; Nematode; Nematophagous fungus (Saxena, G. (45) 319)

Lymphoblastoid cells
Mycoplasma pirum; *Mycoplasma genitalium*; Cell-culture contamination (Leach, R.H. (44) 293)

Lymphogranuloma venereum
Chlamydia trachomatis; (Uptake, Association) (Söderlund, G. (41) 163)

Lysine decarboxylase
Siderophore; Hydroxamate; Iron; *Streptomyces pilosus*; Desferrioxamine B (Schupp, T. (42) 135)

Lysine *N*-acetyltransferase
Escherichia coli; Lysine *N*-hydroxylase; Aerobactin; (Plasmid pColV) (Heydel, P. (40) 305)

Lysine *N*-hydroxylase
Escherichia coli; Lysine *N*-acetyltransferase; Aerobactin; (Plasmid pColV) (Heydel, P. (40) 305)

Lysis
Mucor rouxii; Mucoric acid; endo-β(1,4)-D-Glucuronidase (Dow, J.M. (41) 91)

Lysis, bacterial
Staphylococcus aureus; Norfloxacin; Lipoteichoic acid (Miyake, Y. (40) 301)

Lysogenic conversion
Bordetella pertussis; *Bordetella parapertussis*; Bacteriophage (Paloheimo, M. (41) 79)

Lysostaphin endopeptidase
Staphylococcus simulans biovar *staphylolyticus*; Plasmid-encoded (Heath, L.S. (44) 129)

Magnetic field
Magnetotactic bacterium; Motility; (Isolation method) (Wolfe, R.S. (45) 31)

Magnetotactic bacterium; Motility; Aggregation (Spormann, A.M. (45) 37)

Magnetotactic bacterium
Magnetic field; Motility; (Isolation method) (Wolfe, R.S. (45) 31)

Magnetic field; Motility; Aggregation (Spormann, A.M. (45) 37)

L-Malic acid
Saccharomyces cerevisiae; Anaerobiosis; Ethanol (Salmon, J.M. (42) 213)

Malvin
Anthocyanin; Oxidation; Hydrogen peroxide; *Streptococcus durans*; Biodegradation (Pérez, J. (43) 33)

Manganese oxidation
Metallogenium sp.; Lake (Maki, J.S. (45) 21)

Mannose
Streptococcus mutans; Phosphoenolpyruvate : mannose phosphotransferase system; Phosphotransferase system; Sugar transport (Néron, S. (42) 7)

Vibrio cholerae: Fibronectin binding; Haemagglutination (Wiersma, E.J. (44) 365)

Mannose transport
Penetration of λDNA; *Escherichia coli* (Saris, P.E.J. (44) 377)

Mannose uptake
Gene cloning; *Escherichia coli* (Saris, P.E.J. (44) 371)

Marine interfaces
Oligotrophic marine bacteria; Low-nutrient bacteria; Bioassay (Carlucci, A.F. (45) 211)

Marine phytoplankton
Cyanobacteria; Nitrogen reserve; Cyanophycin; *Synechococcus* sp.; Phycobiliproteins (Newman, J. (44) 221)

Mass spectrometry
Desulfovibrio vulgaris; Hydrogen cycling (Peck, Jr., H.D. (40) 295)

Mycobacteria; Fatty acid; Gas chromatography (Valero-Guillén, P.L. (44) 303)

Paracoccus denitrificans; Propionibacterium thoenii; Pseudomonas spp. (Lloyd, D. (45) 185)

Matric water stress
Nostoc commune; Anhydrous fixation; Ultrastructure (Peat, A. (43) 223)

Mecillinam
Zymomonas mobilis; Penicillin-binding protein; Benzylpenicillin (Karibian, D. (41) 121)

Membrane fluidity
Trichoderma reesei; Protein secretion; Tween; Fatty acid (Panda, T. (41) 85)

Membrane growth
Cytochrome; Cell cycle; Escherichia coli (Scott, R.I. (43) 1)

Membrane transport
Cellobiose; *Streptomyces graniticolor* (Jirelová, M. (41) 279)

Menaquinone
Nocardia brasiliensis; Vitamin K_2; Isoprenoid quinone; (structure) (Collins, M.D. (41) 35)

Vitamin K_2; Anaerobic bacterium; (18 species) (Fernandez, F. (41) 175)

Natronobacterium gregoryi; Vitamin K; Lipid (Collins, M.D. (43) 307)

Vitamin K; Lipids; *Glycomyces* (Collins, M.D. (44) 215)

Mercury
Direct repeat sequence; Methicillin; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Mesophilic starters
Fermented milk; Flavour volatiles; Thermophilic starters; Mixed cultures (Marshall, V.M. (46) 327)

Metabolism
Alanine; Glycine; Stickland reaction; *Clostridium sporogenes*; Syntrophism; Interspecies H_2 transfer; Methanogenic bacterium (Winter, J. (45) 153)

***Metallogenium* sp.**
Manganese oxidation; Lake (Maki, J.S. (45) 21)

Methane monooxygenase
Methylosinus trichosporium; Dichloromethane; (Deficient mutant) (Nicolaidis, A.A. (41) 47)

Methanobacterium thermoautotrophicum
Methylcoenzyme M; Tetrahydromethanopterin; Methyltransferase (Poirot, C.M. (40) 7)

Glutamine; Pyroglutamate; Ammonia assimilation; (Ammonia formation) (Friedmann, H.C. (40) 179)

Desulfobacterium autotrophicum; Biotransformation; Tetrachloromethane; 1,2-Dichloroethane; Trichloromethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Methanogenesis
Methanosarcina barkeri; Acetate; Hydrogen formation (Krzycki, J.A. (40) 193)

Methanosarcina barkeri; Hydrogenase; Carbon monoxide dehydrogenase (Bhatnagar, L. (41) 337)

Methanosarcina barkeri; Trimethylamine; Formaldehyde; Protonmotive force (Müller, V. (43) 183)

H_2 turnover; Acetogenesis; Thermodynamics; H_2 syntrophy; H_2 in lake water (Conrad, R. (45) 243)

Methanogenic bacterium
Tungsten; (Growth-promoting effect; Incorporation) (Zellner, G. (40) 81)

Succinate; Propionate oxidation; (Coculture; ^{13}C-NMR) (Houwen, F.P. (41) 269)

2-Propanol; 2-Butanol; Acetone; 2-Butanone; (Preferential reductants); (Utilization) (Zellner, G. (44) 323)

Alanine; Glycine; Stickland reaction; Metabolism; *Clostridium sporogenes*; Syntrophism; Interspecies H_2 transfer (Winter, J. (45) 153)

Methanogenic community
H_2 partial pressure; H_2 turnover; Activation energy; Gibbs free energy; H_2-dependent methanogenesis (Conrad, R. (45) 281)

Methanogenicity
Archaebacteria; Sulphur dependency; Eubacteria; Eukaryotes; Thermophiles; Methanogens (Tiboni, O. (44) 203)

Methanogens
Archaebacteria; Sulphur dependency; Methanogenicity; Eubacteria; Eukaryotes; Thermophiles (Tiboni, O. (44) 203)

Methanol
Clostridium thermoaceticum; Carbon monoxide; Viologen dye (White, H. (43) 173)

Methanosarcina barkeri
Methanogenesis; Acetate; Hydrogen formation (Krzycki, J.A. (40) 193)

Hydrogenase; Methanogenesis; Carbon monoxide dehydrogenase (Bhatnagar, L. (41) 337)

Trimethylamine; Formaldehyde; Methanogenesis; Protonmotive force (Müller, V. (43) 183)

Methicillin
Direct repeat sequence; Mercury; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Methionine
Xanthomonas campestris; Xanthan (Pielken, P. (44) 27)

Methylamine dehydrogenase
Pyrroloquinoline quinone; Methylotrophic bacteria; *Paracoccus denitrificans* (Davidson, V.L. (44) 121)

Methylammonium transport
Synechococcus R-2; (regulation) (Boussiba, S. (43) 289)

Methylation inhibitors
Streptomyces cinnamonensis; Monensins; *p*-Aminosalicylic acid; Sulphonamides; Aminopterine; 3-*O*-Demethylmonensins, Biosynthesis (Pospíšil, S. (44) 283)

Methylcoenzyme M
Methanobacterium thermoautotrophicum; Tetrahydromethanopterin; Methyltransferase (Poirot, C.M. (40) 7)

Methylomonas albus
Plasmid transfer (McPheat, W.L. (41) 185)

Methylophilus methylotrophus
Serine; Arginine; Amino acid biosynthesis; (Regulation) (Kearney, P. (42) 109)

Prime plasmid; Heterologous gene expression; Complementation; Plasmid transfer (Kearney, P. (44) 7)

Methylosinus trichosporium
Dichloromethane; Methane monooxygenase; (Deficient mutant) (Nicolaidis, A.A. (41) 47)

Methylotrophic bacteria
Methylamine dehydrogenase; Pyrroloquinoline quinone; *Paracoccus denitrificans* (Davidson, V.L. (44) 121)

Escherichia coli; Plasmid transfer; Phenotype restoration; Auxotrophic mutant (Al-Taho, N.M. (43) 235)

Methylotrophic yeast
Glycerol dehydrogenase; Dihydroxyacetone kinase; Glycerol kinase (Tani, Y. (40) 151)

Methyl sulphate
Alkyl sulphatase; Biodegradation; Butyl sulphate; Propyl sulphate; Ethyl sulphate; (Bacteria) (White, G.F. (40) 173)

Methyltransferase
Methanobacterium thermoautotrophicum; Methylcoenzyme M; Tetrahydromethanopterin (Poirot, C.M. (40) 7)

Miconazole
Poly (isobutyl cyanoacrylate) nanoparticles; *Candida albicans*; Amphotericin B; 5-Fluorocytosine (Bajwa, P.S. (44) 413)

Microbial activity
Anaerobic settlement; Tetrazolium salt; Hydrogen evolution (Oren, A. (45) 127)

Microbial flora
Oesophagus; Epithelium; (Microscopy) (Tannock, G. (45) 199)

Microbial mat
Cyanobacteria; Osmotic adjustment; Carbohydrates; Glucosylglycerol; Trehalose; Sucrose (Stal, L.J. (45) 305)

Cyanobacterium; Purple sulphur bacterium; Green sulphur bacterium; Ultrastructure; Pigment analysis; Electron microscopy; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Microbiological analyses
Mucin; Coprostanol; Tryptic activity; Short-chain fatty acids; Beta-aspartylglycine (Carlstedt-Duke, B. (45) 251)

Microcoleus chtonoplastes
Photosynthesis; Sulphide; Thiosulphate; (Sulphide oxidation) (De Wit, R. (45) 7)

Microcultural study
Growth equation; First order reaction kinetics; Lag time; Rate of growth initiation of parent cells (Mochizuki, M. (45) 291)

Microcystis aeruginosa
Buoyancy; Gas vesicle; Chemostat; Phosphate limitation (Konopka, A. (45) 135)

Micromonospora viridifaciens
Neuraminidase; (Production) (Aisaka, K. (44) 289)

Microorganism
Gradient plate, gel-stabilised; Cultivation method; (Response to environment) (Wimpenny, J. (40) 263)

Milk
Amino acids; Limited growth; Starter cultures (Hugenholtz, J. (45) 191)

Mitotic index
Leukopoiesis; Virulence plasmid; Bone-marrow cell; *Yersinia enterocolitica*; (Mouse) (Román, S.M. (43) 219)

Mixed cultures
Fermented milk; Flavour volatiles; Mesophilic starters; Thermophilic starters (Marshall, V.M. (46) 327)

Monensins
Streptomyces cinnamonensis; Methylation inhibitors; *p*-Aminosalicylic acid; Sulphonamides; Aminopterine; 3-*O*-Demethylmonensins, Biosynthesis (Pospíšil, S. (44) 283)

Monoclonal antibodies
Synthetic lipid A analogues; Lipid A epitopes (Arata, S. (44) 231)

Bordetella pertussis; Passive protection; Haemorrhagic alveolitis; Adenylate cyclase; Pertussis toxini (Mouse) (Brézin, C. (42) 75)

Bordetella pertussis; Pertussis toxin; Immunoblotting (Anwar, H. (44) 141)

Mono-oxygenase
Isoprene; 1,3-Butadiene; *Nocardia* sp.; Epoxidation (Van Ginkel, C.G. (45) 275)

Morphogenesis
Candida albicans; Trifluoperazine (Roy, B.G. (41) 327)

Myxococcus; *Coralloides*; *Myxococcus fulvus*; Diffusible factor; Aggregation (Ruiz, C. (43) 143)

Trap formation; Attractant; Low nutrient salt medium; Nematode; Nematophagous fungus (Saxena, G. (45) 319)

Mortality of larva
Heat-resistant spore; Persistence (Paily, K.P. (45) 313)

Motility
Mycoplasma sp.; Erythrocyte; (Cattle; Sheep; Fish gill) (Fischer, M. (40) 321)

Magnetotactic bacterium; Magnetic field; (Isolation method) (Wolfe, R.S. (45) 31)

Magnetotactic bacterium; Magnetic field; Aggregation (Spormann, A.M. (45) 37)

Mucin
Coprostanol; Tryptic activity; Short-chain fatty acids; Beta-aspartylglycine; Microbiological analyses (Carlstedt-Duke, B. (45) 251)

Mucoric acid
Mucor rouxii; endo-β(1,4)-D-Glucuronidase; Lysis (Dow, J.M. (41) 91)

Mucor rouxii
Mucoric acid; endo-β(1,4)-D-Glucuronidase; Lysis (Dow, J.M. (41) 91)

Trehalose; Glycerol; Ethanol; Spore germination (Van Laere, A.J. (41) 247)

Murein biosynthesis
Escherichia coli; β-Lactam antibiotics; Peptidoglycan; Penicillin-binding protein (Pisabarro, A.G. (42) 81)

Mutans streptococci
haematin; *Enterococcus* sp. (James, S.M. (44) 95)

Mutant
S-Adenosylmethionine; *Escherichia coli*; (Biosynthesis (Kimchi, B. (43) 101)

Mycobacteria
Fatty acid; Gas chromatography; Mass spectrometry (Valero-Guillén, P.L. (44) 303)

Rifampicin; Antibiotic resistance (inactivation); *Rhodococcus* (Dabbs, E.R. (44) 395)

Mycobacterium bovis
Gene library; Biotinylated protein; Protein synthesis; Streptavidin (Collins, M.E. (43) 53)

Mycobacterium lepraemurium
ribosome RNA gene (Suzuki, Y. (44) 73)

Mycolates
Phthiocerol dimycocerosate, PDIM; Phenolic glycolipid, PGL-I; Phosphatidyl inositol mannoside, PIM; Leprosy skin biopsies (Venkatesan, K. (44) 167)

Mycoplasma genitalium
Mycoplasma pirum; Lymphoblastoid cells; Cell-culture contamination (Leach, R.H. (44) 293)

Mycoplasma pirum
Mycoplasma genitalium; Lymphoblastoid cells; Cell-culture contamination (Leach, R.H. (44) 293)

***Mycoplasma* sp.**
Motility; Erythrocyte; (Cattle; Sheep; Fish gill) (Fischer, M. (40) 321)

Myxococcus
Coralloides; *Myxococcus fulvus*; Diffusible factor; Morphogenesis; Aggregation (Ruiz, C. (43) 143)

Myxococcus fulvus
Myxococcus; *Coralloides*; Diffusible factor; Morphogenesis; Aggregation (Ruiz, C. (43) 143)

Myxococcus xanthus
Acid phosphatase; β-Lactamase; (*Escherichia coli* enzymes) (Breton, A.M. (40) 183)

NADH diaphorase
Chlamydomonas reinhardtii; Xanthine dehydrogenase (Pérez-Vicente, R. (43) 321)

Naegleria fowleri
Acanthamoeba culbertsoni; Sinefungin; Difluoromethylornithine; (Drug sensitivity) (Ferrante, A. (40) 67)

Natronobacterium gregoryi
Vitamin K; Menaquinone; Lipid (Collins, M.D. (43) 307)

Neisseria
Restriction endonuclease; Restriction-modification systems; In vivo DNA methylation (Sullivan, K.M. (44) 389)

Neisseria gonorrhoeae
Azurin; H.8 antigen; Lipoprotein (Gotschlich, E.C. (43) 253)

Nematode
Trap formation; Morphogenesis; Attractant; Low nutrient salt medium; Nematophagous fungus (Saxena, G. (45) 319)

Nematophagous fungus
Trap formation; Morphogenesis; Attractant; Low nutrient salt medium; Nematode (Saxena, G. (45) 319)

Neuraminidase
Sendai virus; HN glycoprotein; Haemagglutinin; (Antigenic determinant; Monoclonal antibody) (Sugii, S. (40) 129)

Micromonospora viridifaciens; (Production) (Aisaka, K. (44) 289)

Nickel cyanide
Pseudomonas fluorescens; Cyanide; (Nitrogen source) (Rollinson, G. (40) 199)

Nickel resistance
Alcaligenes eutrophus; Plasmid; Nickel uptake (Siddiqui, R.A. (43) 9)

Nickel uptake
Alcaligenes eutrophus; Nickel resistance; Plasmid (Siddiqui, R.A. (43) 9)

Nigericin
Protonmotive force; Valinomycin; *Leuconostoc mesenteroides*; Dextransucrase; Enzyme secretion (Otts, D.R. (42) 179)

Nitrate
Sediment, estuarine; Ammonium; Nitrate-reducing bacterium; Bacterial community (King, D. (45) 15)

Nitrate assimilation
Azotobacter chroococcum; Nitrogen fixation (Cejudo, F.J. (43) 5)

Nitrate-reducing bacterium
Sediment, estuarine; Nitrate; Ammonium; Bacterial community (King, D. (45) 15)

Nitrate reductase
Salmonella typhimurium; Chlorate sensitivity; (*chlC* and *phs* mutants) (Riggs, D.L. (44) 427)

Nitrification
Nitrobacter winogradskyi; Chlorite; (HPLC) (Hynes, R.K. (41) 181)

Nitrobacter winogradskyi
Chlorite; Nitrification; (HPLC) (Hynes, R.K. (41) 181)

Nitrogenase
Anabaena sp.; Heterocyst; (Heterocystless mutant) (Spence, D.W. (40) 119)

Cold adaptation; *Rhizobium* symbiosis (Prévost, D. (45) 205)

Electron transport; (Bioenergetics) (Haaker, H. (46) 57)

Nitrogen control
Ammonium pool; Cyclic retention (Narula, N. (44) 193)

Nitrogen fixation
Heliobacillus mobilis; Bacteriochlorophyll *g*; (Rice paddy ecology) (Beer-Romero, P. (4) 109)

Plasmid transfer; Plasmid stability; *Rhizobium* sp.; (IncQ and IncP-1 vectors) (Donnelly, D.F. (42) 141)

Azotobacter chroococcum; Nitrate assimilation (Cejudo, F.J. (43) 5)

Oscillatoria sp.; Light-dark cycle (Stal, L.J. (45) 227)

Hydrogen metabolism; (Energy costs) (Stam, H. (46) 73)

Nitrogen reserve
Cyanobacteria; Cyanophycin; *Synechococcus* sp.; Phycobiliproteins; Marine phytoplankton (Newman, J. (44) 221)

***N,N'*-Dicyclohexylcarbodiimide**
Treponema phagedenis; Outer sheath (Masuda, K. (41) 73)

Nocardia brasiliensis
Vitamin K_2; Menaquinone; Isoprenoid quinone; (structure) (Collins, M.D. (41) 35)

***Nocardia* sp.**
Isoprene; 1,3-Butadiene; Mono-oxygenase; Epoxidation (Van Ginkel, C.G. (45) 275)

Non-nodulating
Streptomycin dependent; Cross-resistance; Slow-growing rhizobia (Ahmad, M.H. (44) 357)

Norfloxacin
Staphylococcus aureus; Lipoteichoic acid; Lysis, bacterial (Miyake, Y. (40) 301)

Nostoc commune
Immobilized cell; DNA modification; Water stress (Stulp, B.K. (41) 241)

Matric water stress; Anhydrous fixation; Ultrastructure (Peat, A. (43) 223)

Nuclear magnetic resonance
Polyphosphate; Cell cycle; *Candida utilis* (Dawson, P.S.S. (43) 57)

Nuclease gene
Staphylococcus aureus; DNA probe (Liebl, W. (44) 179)

Nucleic acid hybridisation
Chlamydia trachomatis; Diagnosis; (Genito-urinary specimens) (Palva, A. (40) 211)

Nucleotide sequence
Tetracycline resistance; *Campylobacter coli*; DNA–DNA hybridization; gene dissemination (Sougakoff, W. (44) 153)

Nucleotide sequence comparison
Shiga-like toxin; Verotoxin (Jackson, M.P. (44) 109)

Octylglucoside extract
Chlamydiae; Haemagglutination; EB membranes (Chong, K.L. (44) 225)

Oesophagus
Epithelium; Microbial flora; (Microscopy) (Tannock, G. (45) 199)

Oligotrophic marine bacteria
Low-nutrient bacteria; Marine interfaces; Bioassay (Carlucci, A.F. (45) 211)

Oncolysis
Genome organization; Eukaryotic vector; DNA replication; Cell cycle dependence; Viral helper function (Siegl, G. (46) 433)

Operon
Bacillus subtilis; Succinate dehydrogenase; (Deletion) (Fridén, H. (41) 203)

Opsonin
Escherichia coli; Polymorphonuclear leukocyte; Phagocytosis (Rainard, P. (41) 217)

Oral Streptococci
Hydrophobicity; Surface free energy; Zeta potential; Bacterial adhesion (Busscher, H.J. (46) 165)

Organelle
Ascomycete; Woronin body; (Septal plugging, Hyphal damage) (Markham, P. (46) 1)

Organic carbon
Epilithic metabolism; (Colloidal); (Microcalorimetry); (River) (Ford, T.E. (45) 89)

***Oscillatoria* sp.**
Nitrogen fixation; Light-dark cycle (Stal, L.J. (45) 227)

Osmotic adaptation
K^+ transport; $^{86}Rb^+$ transport; *Escherichia coli*; Bacteriophage infection (Alatossava, T. (43) 177)

Osmotic adjustment
Cyanobacteria; Microbial mat; Carbohydrates; Glucosylglycerol; Trehalose; Sucrose (Stal, L.J. (45) 305)

Osmotolerance
Cytoplasmic pH; Fermentation end products; Proton motive force; Glycine betaine; Lactic acid bacteria (Kashket, E.R. (46) 233)

Osmotolerant yeast
Fatty acid; *Saccharomyces cerevisiae* (Tunblad-Johansson, I. (43) 275)

Osteoclast activity
Pasteurella multocida toxin; Atrophic rhinitis; Bone resorption (Foged, N.T. (43) 45)

Outer membrane permeability, TraT protein
Serum resistance; *Escherichia coli*; *Salmonella typhimurium* (Sukupolvi, S. (43) 81)

Outer membrane protease
Deinococcus radiodurans; S-layer protein; Protease (Emde-Kamola, B. (42) 69)

Outer membrane protein
Escherichia coli; Porin; (*ompC* expression; *ompB* mutant) (Luokkamäki, M. (40) 21)

Yersinia enterocolitica; Adhesion; Phagocytosis resistance (Heesemann, J. (40) 37)

Escherichia coli; Adhesion; Adhesion; (Afrimbrial adhesin) (Forestier, C. (40) 47)

Chlamydia trachomatis; Elementary body; Reticulate body; (Immunoblotting, Monoclonal antibody) (Cevenini, R. (42) 47)

Chlamydia trachomatis; (Nucleotide sequence) (Pickett, M.A. (42) 185)

Haemophilus ducreyi; Surface protein (Abeck, D. (44) 49)

Klebsiella; Iron; Enterobactin; Aerobactin (Williams, P. (44) 407)

Outer sheath
Treponema phagedenis; *N,N'*-Dicyclohexylcarbodiimide (Masuda, K. (41) 73)

Oxidation
Anthocyanin; Hydrogen peroxide; *Streptococcus durans*; Malvin; Biodegradation (Pérez, J. (43) 33)

Oxidative stress
Protein degradation; Hydrogen peroxide; Oxidized proteins (Klemes, Y. (44) 277)

Oxidized proteins
Protein degradation; Hydrogen peroxide; Oxidative stress (Klemes, Y. (44) 277)

Oxygen
Superoxide dismutase; Paraquat; 2,2'-Dipyridyl; (8 Prokaryotes) (Schiavone, J.R. (42) 33)

Cutaneous culture; *Propionibacterium sp.* (Cove, J.H. (43) 61)

Lactic acid bacteria (Condon, S. (46) 269)

Oxygen tolerance
Clostridium sp.; Chitin fermentation (Pel, R. (44) 59)

Ozone
Disinfection; Virus; Chlorine dioxide; Peracetic acid; Effluent (Harakeh, S. (44) 335)

Paracoccus denitrificans
Respiration; (Synchronous culture) (Hart, A.J. (41) 345)

Methylamine dehydrogenase; Pyrroloquinoline quinone; Methylotrophic bacteria (Davidson, V.L. (44) 121)

Lipopolysaccharides; *Thiobacillus versutus; Thiobacillus* sp.; Structure; *Rhodobacter* sp. (Yokota, A. (44) 197)

Mass spectrometry; Propionibacterium thoenii; Pseudomonas spp. (Lloyd, D. (45) 185)

Parameter estimation
Heterotrophic activity; Water; Sediment (Choquet, C.G. (45) 59)

Paraquat
Superoxide dismutase; Oxygen; 2,2'-Dipyridyl; (8 Prokaryotes) (Schiavone, J.R. (42) 33)

Passive protection
Bordetella pertussis; Monoclonal antibody; Haemorrhagic alveolitis; Adenylate cyclase; Pertussis toxini (Mouse) (Brézin, C. (42) 75)

Pasteur effect
Saccharomyces cerevisiae; Saccharomyces uvarum; Glycolysis; Fermentation; (Mass spectrometry) (Lloyd, D. (42) 27)

Pasteurella haemolytica
Colominic acid; Polysaccharide (Adlam, C. (42) 23)

Pasteurella multocida
Dermonecrotic toxin; Polypeptides; Reconstitution (Nakai, T. (44) 259)

***Pasteurella multocida* toxin**
Atrophic rhinitis; Bone resorption; Osteoclast activity (Foged, N.T. (43) 45)

Pathogenic bacterium
Antibiotic resistance pattern; (rapid determination; Fish (Austin, B. (43) 295)

Pathogenicity
Xanthomonas; Antiserum (Roberts, I.N. (44) 383)

Pectin degradation
Erwinia chrysanthemi; Tn*5* mutagenesis; Polygalacturonate pathway; (*kdgR* gene) (Condemine, G. (42) 39)

Pectin lyase, Carotovoricin
Erwinia carotovora; recA; lexA; *recA, lexA* gene (McEvoy, J.L. (42) 205)

Penetration of λDNA
Mannose transport; *Escherichia coli* (Saris, P.E.J. (44) 377)

Penicillin
Direct repeat sequence; Mercury; Methicillin; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Penicillin-binding protein
Zymomonas mobilis; Mecillinam; Benzylpenicillin (Karibian, D. (41) 121)

Escherichia coli; β-Lactam antibiotics; Murein biosynthesis; Peptidoglycan (Pisabarro, A.G. (42) 81)

Citrobacter diversus; Bacterial identification; Bacterial membrane proteins (Davies, D.B. (42) 169)

Penicillium aurantiogriseum
Auranthine; (Biosynthesis) (Yeulet, S.E. (41) 207)

Penicillium chrysogenum
Woronin body; Septal pore; Hyphal damage; (Electron microscopy) (Collinge, A.J. (40) 165)

Penicillium funiculosum
DNA sequence; (Genomic distribution; Repeated and single copy sequences) (Sahasrabudhe, N.A. (40) 315)

Peptidase
Proteinase; Starter culture; (Proteolysis in milk and cheese) (Thomas, T.D. (46) 245)

Peptide uptake
Pseudomonas aeruginosa; (Fluorescamine-labelling procedure) (Hulen, C. (40) 103)

Peptidoglycan
Escherichia coli; β-Lactam antibiotics; Murein biosynthesis; Penicillin-binding protein (Pisabarro, A.G. (42) 81)

Peptostreptococcus productus
Carbon monoxide; (Metabolism) (Ma, K. (43) 367)

Peracetic acid
Disinfection; Virus; Chlorine dioxide; Ozone; Effluent (Harakeh, S. (44) 335)

Peritoneal macrophage
Cytomegalovirus; Acute infection; Antiviral activity; (Rat) (Hendrix, M.G.R. (43) 213)

Peroxidase
Coriolus versicolor; Lignin biodegradation; Veratryl alcohol (Dodson, P.J. (42) 17)

Persistence
Heat-resistant spore; Mortality of larva (Paily, K.P. (45) 313)

Pertussis toxin
Bordetella pertussis; Monoclonal antibody; Immunoblotting (Anwar, H. (44) 141)

Pertussis toxin (Mouse)
Bordetella pertussis; Monoclonal antibody; Passive protection; Haemorrhagic alveolitis; Adenylate cyclase (Brézin, C. (42) 75)

Phage adsorption
Restriction and modification; Genetic transfer; Conjugation; Phage-insensitive starters (Klaenhammer, T.R. (46) 313)

Phage DNA synthesis
Bacteriophage; *Salmonella* phage MB78 (Verma, M. (44) 115)

Phage-insensitive starters
Restriction and modification; Phage adsorption; Genetic transfer; Conjugation (Klaenhammer, T.R. (46) 313)

Phagocytes
Amoeba; Leukocytes; Bacteria; Adhesins (Lock, R. (44) 135)

Phagocytosis
Escherichia coli; Polymorphonuclear leukocyte; Opsonin (Rainard, P. (41) 217)

Phagocytosis resistance
Yersinia enterocolitica; Outer membrane protein; Adhesion (Heesemann, J. (40) 37)

Phenol
Pseudomonas putida; Biodegradation; Plasmid (Herrmann, H. (43) 133)

Phenolic glycolipid, PGL-I
Phthiocerol dimycocerosate, PDIM; Phosphatidyl inositol mannoside, PIM; Mycolates; Leprosy skin biopsies (Venkatesan, K. (44) 167)

Phenotype restoration
Escherichia coli; Methylotrophic bacterium; Plasmid transfer; Auxotrophic mutant (Al-Taho, N.M. (43) 235)

Phosphate limitation
Microcystis aeruginosa; Buoyancy; Gas vesicle; Chemostat (Konopka, A. (45) 135)

Phosphatidyl inositol mannoside, PIM
Phthiocerol dimycocerosate, PDIM; Phenolic glycolipid, PGL-I; Mycolates; Leprosy skin biopsies (Venkatesan, K. (44) 167)

Phosphoenolpyruvate-dependent sugar:phosphotransferase system
Glycolysis; Futile cycle; Pyruvate kinase; Inducer exclusion-expulsion (Thompson, J. (46) 221)

Phosphoenolpyruvate : mannose phosphotransferase system
Streptococcus mutans; Phosphotransferase system; Sugar transport; Mannose (Néron, S. (42) 7)

Phosphorylation
Staphylococcus aureus; Leukocidin; (Calcium) (Morinaga, N. (44) 431)

Phosphorylation / dephosphorylation
Citrate lyase regulation; Acetylation/deacetylation; Effect of glutamate (Antranikian, G. (46) 175)

Phosphotransferase system
Streptococcus mutans; Phosphoenolpyruvate : mannose phosphotransferase system; Sugar transport; Mannose (Néron, S. (42) 7)

Photosynthesis
Microcoleus chtonoplastes; Sulphide; Thiosulphate; (Sulphide oxidation) (De Wit, R. (45) 7)

Rhodospirillaceae; Anaerobic respiration (Ferguson, S.J. (46) 117)

Photosynthetic bacterium
Glutamine synthetase; *Rhodobacter capsulatus*; (Immunological comparison) (Abril, N. (43) 89)

Photosynthetic mutants
DNA, chloroplast; DNA, mitochondrial; *Chlamydomonas* (Rochaix, J.-D. (46) 13)

α-Phthalic acid
Quinolinic acid; Cinchomeronic acid (Taylor, B.F. (44) 401)

Phthiocerol dimycocerosate, PDIM
Phenolic glycolipid, PGL-I; Phosphatidyl inositol mannoside, PIM; Mycolates; Leprosy skin biopsies (Venkatesan, K. (44) 167)

Phycobiliproteins
Cyanobacteria; Nitrogen reserve; Cyanophycin; *Synechococcus* sp.; Marine phytoplankton (Newman, J. (44) 221)

Phylogeny
Wolinella succinogenes; (16S rRNA cataloguing) (Stackebrandt, E. (40) 269)

Pigment analysis
Microbial mat; Cyanobacterium; Purple sulphur bacterium; Green sulphur bacterium; Ultrastructure; Electron microscopy; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Pigment synthesis
Yield; Affinities for thiosulfate and oxygen; Continuous culture; Transient state (De Wit, R. (45) 117)

Plant structural material
Anaerobic fungi; Rumen; Degradation; Fermentation (Mountfort, D.O. (46) 401)

Plasmid
Bacillus subtilis; Protoplast; Transformation; (Regeneration medium) (Puyet, A. (40) 1)

Pseudomonas solanacearum; Tannin; (Degradation) (Boominathan, K. (40) 147)

Staphylococcus aureus; (Conjugative; No resistance phenotype) (Udo, E. (40) 279)

Transformation; *Streptococcus pneumoniae*; Alkaline phosphatase; Gene cloning (Pozzi, G. (41) 309)

Bacillus subtilis; Conjugal plasmid transfer; Conjugal mobilization; Clostridium acetobutylicum; Integrational plasmid (Oultram, J.D. (42) 113)

Alcaligenes eutrophus; Nickel resistance; Nickel uptake (Siddiqui, R.A. (43) 9)

Pseudomonas putida; Biodegradation; Phenol (Herrmann, H. (43) 133)

Chlorate resistance; Cloning vector; Positive selection; *Escherichia coli*; (*chlB* gene) (Reiss, J. (43) 201)

Bacillus stearothermophilus; DNA recombination; Plasmid integration; Plasmid excision (Min, Z. (44) 77)

Lactic acid bacteria; Starter culture; Genetic engineering; Conjugation; Transformation; Transduction (Sandine, W.E. (46) 205)

Lactobacillus sp.; Transformation; Transfection; Liposome; Conjugation; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Plasmid curing
Rhodobacter capsulatus; R plasmid (Magnin, J.-P. (41) 157)

Plasmid-encoded
Staphylococcus simulans biovar *staphylolyticus*; Lysostaphin endopeptidase (Heath, L.S. (44) 129)

Plasmid excision
Bacillus stearothermophilus; Plasmid; DNA recombination; Plasmid integration (Min, Z. (44) 77)

Plasmid integration
Bacillus stearothermophilus; Plasmid; DNA recombination; Plasmid excision (Min, Z. (44) 77)

Plasmid pUK702
β-Lactamase; *Klebsiella pneumoniae* (Reid,, A.J. (44) 125)

Plasmid RP4
Escherichia coli; Transposition; Tellurite resistance (Bradley, D.E. (41) 237)

Plasmid segregation
Escherichia coli; (Defective mutant); (Abnormal morphology) (Derbyshire, P. (42) 191)

Plasmid stability
Plasmid transfer; *Rhizobium* sp.; Nitrogen fixation; (IncQ and IncP-1 vectors) (Donnelly, D.F. (42) 141)

Plasmid transfer
Rhizobium meliloti; Symbiosis; (*Medicago* rhizosphere; Sym plasmid) (Broughton, W.J. (40) 251)

Methylomonas albus (McPheat, W.L. (41) 185)

Plasmid stability; *Rhizobium* sp.; Nitrogen fixation; (IncQ and IncP-1 vectors) (Donnelly, D.F. (42) 141)

Escherichia coli; Methylotrophic bacterium; Phenotype restoration; Auxotrophic mutant (Al-Taho, N.M. (43) 235)

Prime plasmid; *Methylophilus methylotrophus*; Heterologous gene expression; Complementation (Kearney, P. (44) 7)

Plasmid transformation
Escherichia coli; Cell volume; Transformation efficiency (Saunders, J.R. (42) 125)

Streptomyces lividans; Electroporation (MacNeil, D.J. (42) 239)

Plasmid vector
Recombinant DNA; Gene cloning; Gene expression; Lactic streptococcus (De Vos, W.M. (46) 281)

Polar lipids
Classification; Isoprenoid quinones; *Leptospiraceae* (Embley, T.M. (44) 273)

Polluted snow
Soil bacteria; Snowmelt; Acidic deposition; Functional properties; Community change (Thompson, I.P. (45) 269)

Polyamine
Actinomycete; Putrescine; Spermidine; Spermine; Cadaverine (Hamana, K. (41) 211)

Halobacterium cutirubrum; Agmatine; Amino acid decarboxylation (Kamekura, M. (43) 301)

Polyethylene
Streptococcus sp. (Group B); Adhesion; (Intrauterine contraceptive device) (Jacques, M. (41) 23)

Polyethylene glycol
Escherichia coli; Invasion; HeLa cell (Bessen, D. (44) 313)

Polyethylene glycol (PEG) graft copolymers
Anti-adhesive compounds; Hydrophilic substrata (Humphries, M. (45) 297)

Polygalacturonate pathway
Erwinia chrysanthemi; Tn*5* mutagenesis; Pectin degradation; (*kdgR* gene) (Condemine, G. (42) 39)

Poly (isobutyl cyanoacrylate) nanoparticles
Candida albicans; Amphotericin B; 5-Fluorocytosine; Miconazole (Bajwa, P.S. (44) 413)

Polymorphonuclear leukocyte
Escherichia coli; Phagocytosis; Opsonin (Rainard, P. (41) 217)

Polypeptides
Bordetella bronchiseptica; Dermonecrotic toxin; Reconstitution (Kume, K. (44) 101)

Pasteurella multocida; Dermonecrotic toxin; Reconstitution (Nakai, T. (44) 259)

Polyphosphate
Cell cycle; Nuclear magnetic resonance; *Candida utilis* (Dawson, P.S.S. (43) 57)

Polysaccharide
Lactarius sp.; *Laccaria* sp.; Bacterium; (Bacteria from fungal material) (Chard, J.M. (40) 345)

Pasteurella haemolytica; Colominic acid (Adlam, C. (42) 23)

Polysaccharide fermentation
Gut microflora; Volatile fatty acid; Faecal bacterium (Englyst, H.N. (45) 163)

Porin
Escherichia coli; Outer membrane protein; (*ompC* expression; *ompB* mutant) (Luokkamäki, M. (40) 21)

Escherichia coli; Klebsiella pneumoniae; Serratia marcescens; Salicylate; (Repression of porin synthesis) (Sawai, T. (40) 233)

Positive selection
Chlorate resistance; Cloning vector; *Escherichia coli*; Plasmid; (*chlB* gene) (Reiss, J. (43) 201)

Potassium loss
Saccharomyces cerevisiae; Cadmium-resistance (Theuvenet, A.P.R. (43) 147)

Prime plasmid
Methylophilus methylotrophus; Heterologous gene expression; Complementation; Plasmid transfer (Kearney, P. (44) 7)

Procetyl 30
Adhesion; Anti-adhesion; Biofouling rig; Surfactant; (Bacteria) (Humphries, M. (42) 91)

Promoter
Bacillus subtilis; *Escherichia coli*; Bacteriophage T5; Transcription (Melin, L. (41) 141)

Promoter mutation
Gene expression; *Salmonella typhimurium*; Aerobic growth; Anaerobiosis (Yamamoto, N. (42) 249)

2-Propanol
Methanogenic bacterium; 2-Butanol; Acetone; 2-Butanone; (Preferential reductants); (Utilization) (Zellner, G. (44) 323)

Propionate oxidation
Methanogenic bacterium; Succinate; (Coculture; ^{13}C-NMR) (Houwen, F.P. (41) 269)

Propionibacteria
Bacterial glycerol metabolism; Glycerol determination; Enzyme production; Enzyme screening (Ince, J.E. (44) 185)

Propionibacterium sp.
Oxygen; Cutaneous culture (Cove, J.H. (43) 61)

Propionibacterium thoenii
Mass spectrometry; *Paracoccus denitrificans; Pseudomonas* spp. (Lloyd, D. (45) 185)

Propyl sulphate
Alkyl sulphatase; Biodegradation; Butyl sulphate; Ethyl sulphate; Methyl sulphate; (Bacteria) (White, G.F. (40) 173)

Protease
Vibrio vulnificus; Histamine; (Vascular permeability enhancement) (Miyoshi, S.-i. (40) 95)

Deinococcus radiodurans; Outer membrane protease; S-layer protein (Emde-Kamola, B. (42) 69)

Botryodiplodia theobromae; (Cocoa pod rot) (Fessehatzion, B. (43) 67)

Protection against disease
Antimicrobial activity; Anticholesteremic factor; Anticarcinogenic activity; *Lactobacillus* sp.; Dairy product (Fernandes, C.F. (46) 343)

Proteinase
Peptidase; Starter culture; (Proteolysis in milk and cheese) (Thomas, T.D. (46) 245)

Protein degradation
Hydrogen peroxide; Oxidized proteins; Oxidative stress (Klemes, Y. (44) 277)

Protein excretion
Clostridium sp.; Amylase; Pullulanase; Chemostat; Cell envelope (Antranikian, G. (41) 193)

Protein export
Pseudomonas aeruginosa; Gene mapping; (Mutant) (Filloux, A. (40) 159)

Protein quality
Lactic acid bacteria; Yoghurt; Kefir; Cultured buttermilk; Lactose digestion; Vitamin (Gurr, M.I. (46) 337)

Protein secretion
Trichoderma reesei; Tween; Membrane fluidity; Fatty acid (Panda, T. (41) 85)

Protein synthesis
Dictyostelium discoideum; (In vitro translation) (Ntamere, A.S. (41) 29)

Mycobacterium bovis; Gene library; Biotinylated protein; Streptavidin (Collins, M.E. (43) 53)

Zymomonas mobilis; Heat shock; Ethanol shock (Michel, G.P.F. (43) 361)

Proteolysis
Psychrotrophic bacterium; *Arthrobacter* strain S_1-55; Temperature; Cell extracts (Potier, P. (44) 267)

Proteus sp.
Enterobacteriaceae; Identification; rRNA; DNA probe (Haun, G. (43) 187)

Proton conductance
Bacillus acidocaldarius; pH (Guffanti, A.A. (41) 275)

Proton motive force
Valinomycin; Nigericin; *Leuconostoc mesenteroides*; Dextransucrase; Enzyme secretion (Otts, D.R. (42) 179)

Methanosarcina barkeri; Trimethylamine; Formaldehyde; Methanogenesis (Müller, V. (43) 183)

Cytoplasmic pH; Fermentation end products; Osmotolerance; Glycine betaine; Lactic acid bacteria (Kashket, E.R. (46) 233)

Protoplast
Bacillus subtilis; Transformation; Plasmid; (Regeneration medium) (Puyet, A. (40) 1)

Aureobasidium pullulans; Heavy metals (Gadd, G.M. (45) 261)

Protoplast fusion
Plasmid; *Lactobacillus* sp.; Transformation; Transfection; Liposome; Conjugation; Genetic engineering (Chassy, B.M. (46) 297)

Protoplast transformation
Staphylococcus carnosus; Transformation; (Protoplast deep-freezing) (Götz, F. (40) 285)

Pseudogene
Inactive genes; Cryptic gene; Gene duplication; Evolution (Beacham, I.R. (46) 409)

Pseudomonas aeruginosa
Peptide uptake; (Fluorescamine-labelling procedure) (Hulen, C. (40) 103)

Protein export; Gene mapping; (Mutant) (Filloux, A. (40) 159)

Gene expression; *Escherichia coli*; Consensus promoter; Beta galactosidase; Δ^1-pyrroline 5-carboxylate reductase (Soldati, L. (42) 163)

Pseudomonas lectin; Immunization; Vaccine (Sudakevitz, D. (43) 313)

Sediment, salt-marsh; Assay, microbiological; Total organic carbon (Nedwell, D.B. (45) 47)

Lipopolysaccharides; Uronic acid; Ulosonic acid (Knirel, Y.A. (46) 381)

Pseudomonas fluorescens
Cyanide; Nickel cyanide; (Nitrogen source) (Rollinson, G. (40) 199)

Pseudomonas lectin
Pseudomonas aeruginosa; Immunization; Vaccine (Sudakevitz, D. (43) 313)

Pseudomonas pseudomallei
Exotoxin; Antibody; (Detection; Enzyme immunoassay) (Ismail, G. (40) 27)

Pseudomonas putida
Biodegradation; Phenol; Plasmid (Herrmann, H. (43) 133)

Toluene oxidation; Gene duplication; Isoenzymes (Jenkins, R.O. (44) 209)

Pseudomonas solanacearum
Plasmid; Tannin; (Degradation) (Boominathan, K. (40) 147)

***Pseudomonas* sp.**
4-Chlorobenzoate dehydrogenase; (Properties) (Thiele, J. (41) 115)

Mass spectrometry; *Paracoccus denitrificans; Propionibacterium thoenii* (Lloyd, D. (45) 185)

***Pseudomonas* sp. strain P51**
Biodegradation; Xenobiotic compound; Inoculation study; River water (Van der Meer, J.R. (45) 333)

Psychrotrophic bacterium
Arthrobacter strain S_1-55; Proteolysis; Temperature; Cell extracts (Potier, P. (44) 267)

Pullulanase
Clostridium sp.; Amylase; Protein excretion; Chemostat; Cell envelope (Antranikian, G. (41) 193)

Pulmonary surfactant
Escherichia coli; Lipopolysaccharide; (Guinea pig) (Goto, H. (41) 199)

Purple sulphur bacterium
Microbial mat; Cyanobacterium; Green sulphur bacterium; Ultrastructure; Pigment analysis; Electron microscopy; Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Bacteriochlorophyll; Anoxygenic photosynthesis; Green sulphur bacterium; Cyanobacterium (Pierson, B. (45) 365)

Putrescine
Actinomycete; Polyamine; Spermidine; Spermine; Cadaverine (Hamana, K. (41) 211)

Pyelonephritis
Iron; *Escherichia coli*; Virulence factor; (Rat) (Sharma, S. (41) 295)

Pyroglutamate
Methanobacterium thermoautotrophicum; Glutamine; Ammonia assimilation; (Ammonia formation) (Friedmann, H.C. (40) 179)

***Pyrrhocoris apterus* (L.)**
Symbiosis; (*Streptococcus); (Hafnia)* (Haas, F. (45) 99)

Δ^1-Pyrroline 5-carboxylate reductase
Pseudomonas aeruginosa; Gene expression; *Escherichia coli*; Consensus promoter; Beta galactosidase (Soldati, L. (42) 163)

Pyrroloquinoline quinone
Methylamine dehydrogenase; Methylotrophic bacteria; *Paracoccus denitrificans* (Davidson, V.L. (44) 121)

Pyruvate dehydrogenase complex
Chloramphenicol acetyltransferase; Dihydrolipoamide acetyltransferase (Guest, J.R. (44) 417)

Pyruvate kinase
Glycolysis; Futile cycle; Inducer exclusion-expulsion; Phosphoenolpyruvate-dependent sugar:phosphotransferase system (Thompson, J. (46) 221)

Quinolinic acid
o-Phthalic acid; Cinchomeronic acid (Taylor, B.F. (44) 401)

4-Quinolone
RecA protein; *Escherichia coli*; SOS-response; (*recA*::*lac* fusion) (Piddock, L.J.V. (41) 289)

Quinoprotein
Acinetobacter calcoaceticus; Glucose dehydrogenase; (Substrate specificity) (Dokter, P. (43) 195)

Rate of growth initiation of parent cells
Growth equation; First order reaction kinetics; Microcultural study; Lag time (Mochizuki, M. (45) 291)

$^{86}Rb^{+}$ transport
Osmotic adaptation; K^{+} transport; *Escherichia coli*; Bacteriophage infection (Alatossava, T. (43) 177)

***recA, lexA* gene**
Erwinia carotovora; recA; lexA; Pectin lyase, Carotovoricin (McEvoy, J.L. (42) 205)

RecA protein
Escherichia coli; SOS-response; 4-Quinolone; (*recA*::*lac* fusion) (Piddock, L.J.V. (41) 289)

Receptor
Escherichia coli; Heat-stable enterotoxin; Diarrhea; (Piglet) (Saeed, A.M. (43) 247)

Recombinant DNA
Plasmid vector; Gene cloning; Gene expression; Lactic streptococcus (De Vos, W.M. (46) 281)

Recombination
DNA rearrangement; Transposable element IS1; Bacteriophage P1; Lactose aperon; *Escherichia coli* (Iida, S. (43) 107)

DNA rearrangement; Deletion; Inversion; Transposable element IS1; R plasmid; Bacteriophage P1 (Iida, S. (43) 117)

Reconstitution
Bordetella bronchiseptica; Dermonecrotic toxin; Polypeptides (Kume, K. (44) 101)

Pasteurella multocida; Dermonecrotic toxin; Polypeptides (Nakai, T. (44) 259)

Regulatory gene
Bacillus subtilis; Levansucrase (Martin, I. (44) 39)

Resistance plasmid
Escherichia coli; Formaldehyde (Kaulfers, P.-M. (43) 161)

Bacillus anthracis; Kanamycin; Transformation (Makino, S.-i. (44) 45)

Direct repeat sequence; Mercury; Methicillin; Tetracycline; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Insertion sequence (Gillespie, M.T. (43) 165)

Carbadox (Schmetzer, H. (44) 1)

Respiration
Bacillus subtilis; Cell cycle; (Oscillations; Effect of inhibitors) (Hart, A.J. (40) 339)

Paracoccus denitrificans; (Synchronous culture) (Hart, A.J. (41) 345)

Respiratory chain
Streptomyces sp.; Cytochrome; (3 Thermotolerant species). (Edwards, C. (40) 61)

Respiratory infection
Bordetella pertussis; Infection; (Mouse) (Alonso, J.M. (40) 273)

Restriction and modification
Phage adsorption; Genetic transfer; Conjugation; Phage-insensitive starters (Klaenhammer, T.R. (46) 313)

Restriction endonuclease
Restriction-modification systems; In vivo DNA methylation; *Neisseria* (Sullivan, K.M. (44) 389)

Restriction-modification systems
Restriction endonuclease; In vivo DNA methylation; *Neisseria* (Sullivan, K.M. (44) 389)

Reticulate body
Chlamydia trachomatis; Elementary body; Outer membrane protein; (Immunoblotting, Monoclonal antibody) (Cevenini, R. (42) 47)

Rhizobium leguminosarum
Soil; Survival (Jensen, E.S. (45) 221)

Rhizobium meliloti
Ecology; Genetic diversity; (Competitive dominance) (Broughton, W.J. (40) 245)

Symbiosis; Plasmid transfer; (*Medicago* rhizosphere; Sym plasmid) (Broughton, W.J. (40) 251)

tRNA phylogenesis; *Bordetella pertussis* (Crenon, I. (44) 19)

***Rhizobium* sp.**
Symbiotic defective mutant; (Cowpea; Tn*5* mutagenesis) (McLaughlin, W. (41) 331)

Plasmid transfer; Plasmid stability; Nitrogen fixation; (IncQ and IncP-1 vectors) (Donnelly, D.F. (42) 141)

Cowpea; Soil, tropical; (Growth, Survival) (Aarons, S. (45) 77)

Competition; Soil; Inoculation; (Mung bean) (Rangarajan, M. (45) 85)

***Rhizobium* symbiosis**
Nitrogenase; Cold adaptation (Prévost, D. (45) 205)

Rhodobacter capsulatus
Glutamine synthetase; (Sulphydryl group) (Caballero, F.J. (41) 7)

R plasmid; Plasmid curing (Magnin, J.-P. (41) 157)

Glutamine synthetase; Photosynthetic bacterium; (Immunological comparison) (Abril, N. (43) 89)

***Rhodobacter* sp.**
Lipopolysaccharides; *Thiobacillus versutus; Thiobacillus* sp.; Structure; *Paracoccus denitrificans* (Yokota, A. (44) 197)

Rhodococcus
Rifampicin; Antibiotic resistance (inactivation); Mycobacterium (Dabbs, E.R. (44) 395)

7-amino-4-methylcoumarin derivatives; Classification and identification (Goodfellow, M. (44) 349)

Rhodococcus erythropolis
Fusidic acid; Antibiotic resistance; (Antibiotic inactivation) (Dabbs, E.R. (40) 135)

Rhodocyclus gelatinosus
Carbon monoxide; Light; Carbon monoxide dehydrogenase (Champine, J.E. (44) 307)

Rhodospirillaceae
Photosynthesis; Anaerobic respiration (Ferguson, S.J. (46) 117)

Ribosomal protein
Streptomyces sp; Ribosome; (HPLC; Heterogeneity) (Fierro, (41) 283)

Ribosomal RNA
Dictyostelium discoideum; RNA synthesis; AMP, cyclic (Uchiyama, S. (40) 99)

Ribosome
Streptomyces sp; Ribosomal protein; (HPLC; Heterogeneity) (Fierro, (41) 283)

Elongation Factor 1; Aminoacyl transfer rna; Shiga-like toxin; *Escherichia coli*; Shiga toxin (Igarashi, K. (44) 91)

Ribulose-1,5-bisphosphate carboxylase
Carboxysome; *Thiobacillus neapolitanus* (Holthuijzen, Y.A. (42) 121)

Rifampicin
Antibiotic resistance (inactivation); *Rhodococcus; Mycobacterium* (Dabbs, E.R. (44) 395)

River water
Biodegradation; Xenobiotic compound; Inoculation study; *Pseudomonas* sp. strain P51 (Van der Meer, J.R. (45) 333)

rRNA
Proteus sp.; Enterobacteriaceae; Identification; DNA probe (Haun, G. (43) 187)

ribosome RNA gene
Mycobacterium lepraemurium (Suzuki, Y. (44) 73)

tRNA phylogenesis
Bordetella pertussis; Rhizobium meliloti (Crenon, I. (44) 19)

RNA synthesis
Dictyostelium discoideum; Ribosomal RNA; AMP, cyclic (Uchiyama, S. (40) 99)

R plasmid
Rhodobacter capsulatus; Plasmid curing (Magnin, J.-P. (41) 157)

DNA rearrangement; Cointegration; Deletion; Bacteriophage P1; Transposable element IS1 (Iida, S. (43) 111)

DNA rearrangement; Deletion; Inversion; Transposable element IS1; Recombination; Bacteriophage P1 (Iida, S. (43) 117)

R prime formation
Agrobacterium tumefaciens; Chromosome mobilization; Linkage mapping; Chromosomal genes (Waelkens, F. (44) 329)

Rumen
Anaerobic fungi; Plant structural material; Degradation; Fermentation (Mountfort, D.O. (46) 401)

Saccharification
Ecology; Lignin degradation; Cellulases; Xylanases; Bioconversion (McCarthy, A.J. (46) 145)

Saccharomyces cerevisiae
Carbon dioxide; Amino acid absorption; Fermentation (Slaughter, J.C. (40) 239)

Glucose transport; Sporulation; (Transport inactivation) (Cid, A. (41) 59)

Cell walls; Glucan; Glucosaminoglycan (Mol, P.C. (41) 95)

Saccharomyces uvarum; Pasteur effect; Glycolysis; Fermentation; (Mass spectrometry) (Lloyd, D. (42) 27)

L-Malic acid; Anaerobiosis; Ethanol (Salmon, J.M. (42) 213)

Cadmium-resistance; Potassium loss (Theuvenet, A.P.R. (43) 147)

Fatty acid; Osmotolerant yeast (Tunblad-Johansson, I. (43) 275)

Copper uptake (De Rome, L. (43) 283)

Glycogen formation; Growth (Rocha-Leão, M.H.M. (44) 423)

Saccharomyces cerevisiae, Wine-making (Rosini, G. (44) 81)

Saccharomyces uvarum
Saccharomyces cerevisiae; Pasteur effect; Glycolysis; Fermentation; (Mass spectrometry) (Lloyd, D. (42) 27)

Saccharopolyspora hirsuta
Taxonomy; Fatty acids (Embley, T.M. (41) 131)

Salicylate
Escherichia coli; Klebsiella pneumoniae; Serratia marcescens; Porin; (Repression of porin synthesis) (Sawai, T. (40) 233)

Saliva
Streptococcus mutans; Agglutinin; Hydrophobicity (Rundegren, J. (40) 141)

***Salmonella* enterotoxin**
Cholera toxin; Chromosomal gene; (Southern-blot hybridization) (Chopra, A.K. (43) 345)

Salmonella minnesota
Lipopolysaccharide; (Monoclonal antibody; Core region) (Appelmelk, B.J. (40) 71)

***Salmonella* phage MB78**
Bacteriophage; Phage DNA synthesis (Verma, M. (44) 115)

Salmonella typhimurium
HeLa cell invasion; Calcium; Virulence (Niesel, D.W. (41) 299)

Promoter mutation; Gene expression; Aerobic growth; Anaerobiosis (Yamamoto, N. (42) 249)

TraT protein; Virulence plasmid; *Escherichia coli* (Sukupolvi, S. (43) 75)

Serum resistance; *Escherichia coli*; Outer membrane permeability, TraT protein (Sukupolvi, S. (43) 81)

Chlorate sensitivity; Nitrate reductase; (*chlC* and *phs* mutants) (Riggs, D.L. (44) 427)

Salmonella virchow
Bacteriophage typing (Chambers, R.M. (40) 155)

Saturation constant
Growth; Affinity constant (Owens, J.D. (46) 419)

Schizosaccharomyces pombe
Glycerol catabolism; Glycerol dehydrogenase; Dihydroacetone kinase; (Mutant) (Kong, Y.-C. (43) 71)

SDS-polyacrylamide gels
DNases; corynebacteria; *Bacillus subtilis*; DNase-plate assay (Rama, J.M. (44) 343)

Seasonal changes
H_2-competition; Interspecies H_2 transfer; Syntrophic associations; In situ H_2 concentrations (Conrad, R. (45) 107)

Seawater
Copiotrophic bacteria; Cadmium; Starvation (Nyström, T. (45) 143)

Sediment
Heterotrophic activity; Parameter estimation; Water (Choquet, C.G. (45) 59)

Sediment, estuarine
Nitrate; Ammonium; Nitrate-reducing bacterium; Bacterial community (King, D. (45) 15)

Sediment-microorganism relationship
Microbial mat; Cyanobacterium; Purple sulphur bacterium; Green sulphur bacterium; Ultrastructure; Pigment analysis; Electron microscopy (Nicholson, J.A.M. (45) 343)

Sediment, salt-marsh
Pseudomonas aeruginosa; Assay, microbiological; Total organic carbon (Nedwell, D.B. (45) 47)

Selenomonas ruminantium
Lactate racemase; D-Lactate; Glucose; (Glucose metabolism) (Melville, S.B. (40) 289)

Sendai virus
HN glycoprotein; Haemagglutinin; Neuraminidase; (Antigenic determinant; Monoclonal antibody) (Sugii, S. (40) 129)

Septal pore
Penicillium chrysogenum; Woronin body; Hyphal damage; (Electron microscopy) (Collinge, A.J. (40) 165)

Septal pore plugging
Sordaria brevicollis; Hyphae; Cell nucleus; (Microscopy) (Collinge, A.J. (44) 85)

Serine
Arginine; Amino acid biosynthesis; *Methylophilus methylotrophus*; (Regulation) (Kearney, P. (42) 109)

Serine protease
Thermus aquaticus (Cowan, D.A. (43) 155)

Serratia marcescens
Escherichia coli; Klebsiella pneumoniae; Porin; Salicylate; (Repression of porin synthesis) (Sawai, T. (40) 233)

Serum resistance
Escherichia coli; *Salmonella typhimurium*; Outer membrane permeability, TraT protein (Sukupolvi, S. (43) 81)

Serum sensitivity assay
Escherichia coli K1; Turbidimetric assay (Pelkonen, S. (42) 53)

Sheep
Mycoplasma sp.; Motility; Erythrocyte; (Cattle; Fish gill) (Fischer, M. (40) 321)

Shiga-like toxin
Cytotoxin; Haemorrhagic colitis; Haemolytic-uraemic syndrome; *Escherichia coli*; (Antigenic heterogeneity) (Johnson, W.M. (43) 15)

Vero toxin; *Escherichia coli* bacteriophage; (Cloning) (Kurazono, H. (44) 23)

Escherichia coli; Verotoxin; Edema disease; (Pig) (Marques, L.R.M. (44) 33)

Elongation Factor 1; Aminoacyl transfer rna; Ribosome; *Escherichia coli*; Shiga toxin (Igarashi, K. (44) 91)

Verotoxin; Nucleotide sequence comparison (Jackson, M.P. (44) 109)

Shiga toxin
Elongation Factor 1; Aminoacyl transfer rna; Ribosome; Shiga-like toxin; *Escherichia coli* (Igarashi, K. (44) 91)

Shigella sonnei
Lipid A; (Structure) (Bath, U.R. (40) 189)

***Shigella* sp.**
Vero cytotoxin; VT gene; *Escherichia coli* (Smith, H.R. (42) 173)

Short-chain fatty acids
Mucin; Coprostanol; Tryptic activity; Beta-aspartylglycine; Microbiological analyses (Carlstedt-Duke, B. (45) 251)

Sialic acid
Streptococcus sp. (Group B); Capsule; Virulence; (Ultrastructure) (Molinari, A. (41) 69)

Siderophore
Azotobacter vinelandii; Transformation; Competence; Iron (Page, W.J. (41) 257)

Hydroxamate; Lysine decarboxylase; Iron; *Streptomyces pilosus*; Desferrioxamine B (Schupp, T. (42) 135)

Signal peptide
Sulphate-reducing bacterium; Electron transfer protein; Amino-terminal sequence (LeGall, J. (46) 35)

Sinefungin
Naegleria fowleri; *Acanthamoeba culbertsoni*; Difluoromethylornithine; (Drug sensitivity) (Ferrante, A. (40) 67)

S-layer
Bacillus sp.; Cell wall (Wahlberg, J. (40) 75)

Clostridium thermosaccharolyticum; Surface protein; (3-D reconstruction) (Cejka, Z. (44) 13)

S-layer protein
Deinococcus radiodurans; Outer membrane protease; Protease (Emde-Kamola, B. (42) 69)

Slow-growing rhizobia
Streptomycin dependent; Non-nodulating; Cross-resistance (Ahmad, M.H. (44) 357)

Snowmelt
Soil bacteria; Polluted snow; Acidic deposition; Functional properties; Community change (Thompson, I.P. (45) 269)

Soil
Rhizobium sp.; Competition; Inoculation; (Mung bean) (Rangarajan, M. (45) 85)

Rhizobium leguminosarum; Survival (Jensen, E.S. (45) 221)

Soil bacteria
Polluted snow; Snowmelt; Acidic deposition; Functional properties; Community change (Thompson, I.P. (45) 269)

Soil, tropical
Rhizobium sp.; Cowpea; (Growth, Survival) (Aarons, S. (45) 77)

Sordaria brevicollis
Hyphae; Septal pore plugging; Cell nucleus; (Microscopy) (Collinge, A.J. (44) 85)

SOS-response
RecA protein; *Escherichia coli*; 4-Quinolone; (*recA*::*lac* fusion) (Piddock, L.J.V. (41) 289)

SPE-A
Streptococcal pyrogenic exotoxin; Group A streptococci; SPE-B; SPE-C; SPE-D; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

SPE-B
Streptococcal pyrogenic exotoxin; Group A streptococci; SPE-A; SPE-C; SPE-D; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

SPE-C
Streptococcal pyrogenic exotoxin; Group A streptococci; SPE-A; SPE-B; SPE-D; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

SPE-D
Streptococcal pyrogenic exotoxin; Group A streptococci; SPE-A; SPE-B; SPE-C; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

Spermidine
Actinomycete; Polyamine; Putrescine; Spermine; Cadaverine (Hamana, K. (41) 211)

Spermine
Actinomycete; Polyamine; Putrescine; Spermidine; Cadaverine (Hamana, K. (41) 211)

Spore
Laser diffractometry; (Bacterial; Fungal; Water content; size) (Ulanowski, Z. (40) 229)

Spore protein; *Clostridium perfringens*; (Amino acid sequence) (Granum, P.E. (42) 225)

Spore germination
Mucor rouxii; Trehalose; Glycerol; Ethanol (Van Laere, A.J. (41) 247)

Spore protein
Spore; *Clostridium perfringens*; (Amino acid sequence) (Granum, P.E. (42) 225)

Sporothrix schenckii
Glucocerebroside (Cardoso, D.B.S. (43) 279)

Sporulation
Saccharomyces cerevisiae; Glucose transport; (Transport inactivation) (Cid, A. (41) 59)

Stability
Ethene-utilizing bacteria; Growth; Compost (Van Ginkel, C.G. (45) 65)

Staphylococcal leukocidin
Calcium; Cytotoxicity; (HL-60 cell) (Morinaga, N. (42) 259)

Staphylococci
Fibrinogen; Fibronectin; Clumping factor (Chhatwal, G.S. (44) 147)

Staphylococcus aureus
Plasmid; (Conjugative; No resistance phenotype) (Udo, E. (40) 279)

Norfloxacin; Lipoteichoic acid; Lysis, bacterial (Miyake, Y. (40) 301)

Direct repeat sequence; Mercury; Methicillin; Tetracycline; Trimethoprim; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Nuclease gene; DNA probe (Liebl, W. (44) 179)

Leukocidin; Phosphorylation; (Calcium) (Morinaga, N. (44) 431)

Staphylococcus carnosus
Protoplast transformation; Transformation; (Protoplast deep-freezing) (Götz, F. (40) 285)

Staphylococcus simulans* biovar *staphylolyticus
Lysostaphin endopeptidase; Plasmid-encoded (Heath, L.S. (44) 129)

Starter culture
Lactic acid bacteria; Plasmid; Genetic engineering; Conjugation; Transformation; Transduction (Sandine, W.E. (46) 205)

Proteinase; Peptidase; (Proteolysis in milk and cheese) (Thomas, T.D. (46) 245)

Amino acids; Limited growth; Milk (Hugenholtz, J. (45) 191)

Food preservation; Lactic acid fermentation; Lactic acid bacteria; (Pickles); (Sauerkraut); (Silage) (Daeschel, M.A. (46) 357)

Starvation
Cellulomonas sp.; Glycogen; Trehalose; Viability; Energy charge (Schimz, K.-L. (40) 333)

Copiotrophic bacteria; Cadmium; Seawater (Nyström, T. (45) 143)

Alteromonas denitrificans; Survival (Nissen, H. (45) 173)

Stickland reaction
Alanine; Glycine; Metabolism; *Clostridium sporogenes*; Syntrophism; Interspecies H_2 transfer; Methanogenic bacterium (Winter, J. (45) 153)

Streptavidin
Mycobacterium bovis; Gene library; Biotinylated protein; Protein synthesis (Collins, M.E. (43) 53)

Streptococcal pyrogenic exotoxin
Group A streptococci; SPE-A; SPE-B; SPE-C; SPE-D; (Fasciitis); (Hypocalcemia) (McMillian, R.A. (44) 317)

Streptococcus durans
Anthocyanin; Oxidation; Hydrogen peroxide; Malvin; Biodegradation (Pérez, J. (43) 33)

Streptococcus lactis
Gene cloning; (Tn*916*) (Dos Santos, A.L.L. (42) 209)

Streptococcus mutans
Saliva; Agglutinin; Hydrophobicity (Rundegren, J. (40) 141)

Phosphoenolpyruvate : mannose phosphotransferase system; Phosphotransferase system; Sugar transport; Mannose (Néron, S. (42) 7)

Adherence, cell; Glucosyltransferase; Glucan (Takehara, T. (42) 13)

Streptococcus pneumoniae
Transformation; Plasmid; Alkaline phosphatase; Gene cloning (Pozzi, G. (41) 309)

Gene enrichment; Gene cloning; Chromosomal transformation (Pérez Ureña, M.T. (42) 153)

Streptococcus salivarius
Cell surface; Adhesion; Surface free energy; Hydrophobicity (Van der Mei, H.C. (40) 15)

***Streptococcus* sp.**
Lactobacillus sp.; *Enterococcus* sp.; Bacteriocin; (Growth inhibition) (James, S.M. (41) 321)

***Streptococcus* sp. (Group B)**
Adhesion; Polyethylene; (Intrauterine contraceptive device) (Jacques, M. (41) 23)

Capsule; Sialic acid; Virulence; (Ultrastructure) (Molinari, A. (41) 69)

Streptomyces cinnamonensis
Methylation inhibitors; Monensins; *p*-Aminosalicylic acid; Sulphonamides; Aminopterine; 3-*O*-Demethylmonensins, Biosynthesis (Pospíšil, S. (44) 283)

***Streptomyces coelicolor* A3(2)**
Colony growth; Continuous culture (Allan, E.J. (43) 139)

Streptomyces graniticolor
Cellobiose; Membrane transport (Jirelová, M. (41) 279)

Streptomyces lividans
Plasmid transformation; Electroporation (MacNeil, D.J. (42) 239)

Streptomyces pilosus
Siderophore; Hydroxamate; Lysine decarboxylase; Iron; Desferrioxamine B (Schupp, T. (42) 135)

***Streptomyces* sp.**
Respiratory chain; Cytochrome; (3 Thermotolerant species). (Edwards, C. (40) 61)

Ribosome; Ribosomal protein; (HPLC; Heterogeneity) (Fierro, (41) 283)

Streptomycetes
Classification; (4-Methylumbelliferone derivative) (Goodfellow, M. (43) 39)

Streptomycin adenylyltransferase
Bacillus subtilis; (Purification; Characterisation) (Kono, M. (40) 223)

Streptomycin dependent
Non-nodulating; Cross-resistance; Slow-growing rhizobia (Ahmad, M.H. (44) 357)

Structure
Lipopolysaccharides; *Thiobacillus versutus; Thiobacillus* sp.; *Rhodobacter* sp.; *Paracoccus denitrificans* (Yokota, A. (44) 197)

Subunit structure
Lactobacillus casei; D-2-Hydroxyisocaproate dehydrogenase; (N-terminal sequence) (Kallwass, H. (43) 263)

Succinate
Methanogenic bacterium; Propionate oxidation; (Coculture; ^{13}C-NMR) (Houwen, F.P. (41) 269)

Succinate dehydrogenase
Bacillus subtilis; Operon; (Deletion) (Fridén, H. (41) 203)

Sucrase
Bacillus subtilis; Sucrose; Levansucrase; (Gene cloning) (Débarbouillé, M. (41) 137)

Sucrose
Bacillus subtilis; Sucrase; Levansucrase; (Gene cloning) (Débarbouillé, M. (41) 137)

Cyanobacteria; Microbial mat; Osmotic adjustment; Carbohydrates; Glucosylglycerol; Trehalose (Stal, L.J. (45) 305)

Sugar composition
Bradyrhizobium; Lipopolysaccharide (Banoub, J.H. (44) 235)

Sugar transport
Streptococcus mutans; Phosphoenolpyruvate : mannose phosphotransferase system; Phosphotransferase system; Mannose (Néron, S. (42) 7)

***Sulfolobus* sp.**
Surface protein; (Freeze-etching); (Image processing) (Prüschenk, R. (43) 327)

Sulphate-reducing bacterium
Electron transfer protein; Amino-terminal sequence; Signal peptide (LeGall, J. (46) 35)

Sulphide
Microcoleus chtonoplastes; Photosynthesis; Thiosulphate; (Sulphide oxidation) (De Wit, R. (45) 7)

Sulphonamides
Streptomyces cinnamonensis; Methylation inhibitors; Monensins; *p*-Aminosalicylic acid; Aminopterine; 3-*O*-Demethylmonensins, Biosynthesis (Pospíšil, S. (44) 283)

Sulphur dependency
Archaebacteria; Methanogenicity; Eubacteria; Eukaryotes; Thermophiles; Methanogens (Tiboni, O. (44) 203)

Sulphur oxidation
Thiobacillus ferrooxidans; Iron (Corbett, C.M. (41) 1)

Superoxide dismutase
Oxygen; Paraquat; 2,2′-Dipyridyl; (8 Prokaryotes) (Schiavone, J.R. (42) 33)

Surface free energy
Streptococcus salivarius; Cell surface; Adhesion; Hydrophobicity (Van der Mei, H.C. (40) 15)

Hydrophobicity; Zeta potential; Oral Streptococci; Bacterial adhesion (Busscher, H.J. (46) 165)

Surface protein
Sulfolobus sp.; (Freeze-etching); (Image processing) (Prüschenk, R. (43) 327)

Clostridium thermosaccharolyticum; S-layer; (3-D reconstruction) (Cejka, Z. (44) 13)

Haemophilus ducreyi; Outer-membrane protein (Abeck, D. (44) 49)

Surfactant
Adhesion; Anti-adhesion; Procetyl 30; Biofouling rig; (Bacteria) (Humphries, M. (42) 91)

Survival
Alteromonas denitrificans; Starvation (Nissen, H. (45) 173)

Rhizobium leguminosarum; Soil (Jensen, E.S. (45) 221)

Symbiosis
Rhizobium meliloti; Plasmid transfer; (*Medicago* rhizosphere; Sym plasmid) (Broughton, W.J. (40) 251)

Pyrrhocoris apterus (L.); (*Streptococcus*); *(Hafnia)* (Haas, F. (45) 99)

Symbiotic defective mutant
Rhizobium sp.; (Cowpea; Tn*5* mutagenesis) (McLaughlin, W. (41) 331)

***Synechococcus* R-2**
Methylammonium transport; (regulation) (Boussiba, S. (43) 289)

***Synechococcus* sp.**
Cyanobacteria; Nitrogen reserve; Cyanophycin; Phycobiliproteins; Marine phytoplankton (Newman, J. (44) 221)

Synthetic lipid A analogues
Lipid A epitopes; Monoclonal antibodies (Arata, S. (44) 231)

Syntrophic anaerobic bacteria
Dialysis culture (Stieb, M. (45) 71)

Syntrophic associations
H_2-competition; Interspecies H_2 transfer; In situ H_2 concentrations; Seasonal changes (Conrad, R. (45) 107)

Syntrophism
Alanine; Glycine; Stickland reaction; Metabolism; *Clostridium sporogenes*; Interspecies H_2 transfer; Methanogenic bacterium (Winter, J. (45) 153)

Tannin
Pseudomonas solanacearum; Plasmid; (Degradation) (Boominathan, K. (40) 147)

Taxonomy
Saccharopolyspora hirsuta; Fatty acids (Embley, T.M. (41) 131)

Lactic acid bacteria (Schleifer, K.H. (46) 201)

Tellurite resistance
Escherichia coli; Plasmid RP4; Transposition (Bradley, D.E. (41) 237)

Temperature
ATP pool; Adenylate energy charge; *Escherichia coli* (Kahru, A. (41) 305)

Psychrotrophic bacterium; *Arthrobacter* strain S_1-55; Proteolysis; Cell extracts (Potier, P. (44) 267)

Testosterone
Corynebacterium; (Metabolism) (Nixon, A. (41) 53)

Tetrachloroethene
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Biotransformation; Tetrachloromethane; 1,2-Dichloroethane; Trichloromethane; 1,1,1-Trichloroethane (Egli, C. (43) 257)

Tetrachloromethane
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Biotransformation; 1,2-Dichloroethane; Trichloromethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Tetracycline
Direct repeat sequence; Mercury; Methicillin; Trimethoprim; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Tetracycline resistance
Campylobacter coli; nucleotide sequence; DNA–DNA hybridization; gene dissemination (Sougakoff, W. (44) 153)

Tetrahydromethanopterin
Methanobacterium thermoautotrophicum; Methylcoenzyme M; Methyltransferase (Poirot, C.M. (40) 7)

Tetrazolium salt
Microbial activity; Anaerobic settlement; Hydrogen evolution (Oren, A. (45) 127)

Thermodynamics
H_2 turnover; Methanogenesis; Acetogenesis; H_2 syntrophy; H_2 in lake water (Conrad, R. (45) 243)

Thermophiles
Archaebacteria; Sulphur dependency; Methanogenicity; Eubacteria; Eukaryotes; Methanogens (Tiboni, O. (44) 203)

Thermophilic bacterium
Filamentous bacterium; Gliding bacterium; (New Zealand hot spring) (Schofield, K.M. (40) 169)

Thermophilic starters
Fermented milk; Flavour volatiles; Mesophilic starters; Mixed cultures (Marshall, V.M. (46) 327)

Thermus aquaticus
Serine protease (Cowan, D.A. (43) 155)

Thiamine, Gene expression
Gene fusion; Anaerobiosis; Leucine; Isoleucine; Valine; *Escherichia coli*; (Biosynthetic gene) (Reams, S.G. (42) 231)

Thiobacillus ferrooxidans
Sulphur oxidation; Iron (Corbett, C.M. (41) 1)

Thiobacillus neapolitanus
Carboxysome; Ribulose-1,5-bisphosphate carboxylase (Holthuijzen, Y.A. (42) 121)

Thiobacillus sp.
Lipopolysaccharides; *Thiobacillus versutus; Structure; Rhodobacter* sp.; *Paracoccus denitrificans* (Yokota, A. (44) 197)

Thiobacillus versutus
Lipopolysaccharides; Thiobacillus sp.; Structure; *Rhodobacter* sp.; *Paracoccus denitrificans* (Yokota, A. (44) 197)

Thiosulphate
Microcoleus chtonoplastes; Photosynthesis; Sulphide; (Sulphide oxidation) (De Wit, R. (45) 7)

Ti-plasmid
Agrobacterium tumefaciens; Chemotaxis; Acetosyringone; (Crown gall, *vir*-region) (Ashby, A.M. (41) 189)

Tn*5* mutagenesis
Erwinia chrysanthemi; Pectin degradation; Polygalacturonate pathway; (kdgR gene) (Condemine, G. (42) 39)

Toluene oxidation
Pseudomonas putida; Gene duplication; Isoenzymes (Jenkins, R.O. (44) 209)

Total organic carbon
Pseudomonas aeruginosa; Sediment, salt-marsh; Assay, microbiological (Nedwell, D.B. (45) 47)

Transcription
Bacillus subtilis; *Escherichia coli*; Bacteriophage T5; Promoter (Melin, L. (41) 141)

Transduction
Lactic acid bacteria; Starter culture; Plasmid; Genetic engineering; Conjugation; Transformation (Sandine, W.E. (46) 205)

Transfection
Transformation; Competence; *Bdellovibrio bacteriovorus*; Bacteriophage MAC-1 (Roberts, R.C. (43) 207)

Plasmid; *Lactobacillus* sp.; Transformation; Liposome; Conjugation; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Transformation
Bacillus subtilis; Protoplast; Plasmid; (Regeneration medium) (Puyet, A. (40) 1)

Staphylococcus carnosus; Protoplast transformation; (Protoplast deep-freezing) (Götz, F. (40) 285)

Azotobacter vinelandii; Competence; Iron; Siderophore (Page, W.J. (41) 257)

Plasmid; *Streptococcus pneumoniae*; Alkaline phosphatase; Gene cloning (Pozzi, G. (41) 309)

Transfection; Competence; *Bdellovibrio bacteriovorus*: Bacteriophage MAC-1 (Roberts, R.C. (43) 207)

Bacillus anthracis; Kanamycin; Resistance plasmid (Makino, S.-i. (44) 45)

Lactobacillus casei; Electroporation (Chassy, B.M. (44) 173)

Lactic acid bacteria; Starter culture; Plasmid; Genetic engineering; Conjugation; Transduction (Sandine, W.E. (46) 205)

Plasmid; *Lactobacillus* sp.; Transfection; Liposome; Conjugation; Genetic engineering; Protoplast fusion (Chassy, B.M. (46) 297)

Transformation efficiency
Escherichia coli; Cell volume; Plasmid transformation (Saunders, J.R. (42) 125)

Transient state
Pigment synthesis; Yield; Affinities for thiosulfate and oxygen; Continuous culture (De Wit, R. (45) 117)

Transposable element IS1
DNA rearrangement; Recombination; Bacteriophage P1; Lactose aperon; *Escherichia coli* (Iida, S. (43) 107)

DNA rearrangement; Cointegration; Deletion; R plasmid; Bacteriophage P1 (Iida, S. (43) 111)

DNA rearrangement; Deletion; Inversion; Recombination; R plasmid; Bacteriophage P1 (Iida, S. (43) 117)

Transposition
Escherichia coli; Plasmid RP4; Tellurite resistance (Bradley, D.E. (41) 237)

Trap formation
Morphogenesis; Attractant; Low nutrient salt medium; Nematode; Nematophagous fungus (Saxena, G. (45) 319)

TraT protein
Virulence plasmid; *Escherichia coli*; *Salmonella typhimurium* (Sukupolvi, S. (43) 75)

Trehalose
Cellulomonas sp.; Glycogen; Viability; Energy charge; Starvation (Schimz, K.-L. (40) 333)

Mucor rouxii; Glycerol; Ethanol; Spore germination (Van Laere, A.J. (41) 247)

Cyanobacteria; Microbial mat; Osmotic adjustment; Carbohydrates; Glucosylglycerol; Sucrose (Stal, L.J. (45) 305)

Treponema phagedenis
Outer sheath; *N,N'*-Dicyclohexylcarbodiimide (Masuda, K. (41) 73)

s-Triazine
Biodegradation (Cook, A.M. (46) 93)

1,1,1-Trichloroethane
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Biotransformation; Tetrachloromethane; 1,2-Dichloroethane; Trichloromethane; Tetrachloroethene (Egli, C. (43) 257)

Trichloromethane
Methanobacterium thermoautotrophicum; *Desulfobacterium autotrophicum*; Biotransformation; Tetrachloromethane; 1,2-Dichloroethane; 1,1,1-Trichloroethane; Tetrachloroethene (Egli, C. (43) 257)

Trichoderma reesei
Protein secretion; Tween; Membrane fluidity; Fatty acid (Panda, T. (41) 85)

Cellulase; (Heterogeneity) (Sprey, B. (43) 25)

Trifluoperazine
Candida albicans; Morphogenesis (Roy, B.G. (41) 327)

Trimethoprim
Direct repeat sequence; Mercury; Methicillin; Tetracycline; *Staphylococcus aureus*; Aminoglycoside; Penicillin; Resistance plasmids; Insertion sequence (Gillespie, M.T. (43) 165)

Trimethylamine
Methanosarcina barkeri; Formaldehyde; Methanogenesis; Protonmotive force (Müller, V. (43) 183)

Tryptic activity
Mucin; Coprostanol; Short-chain fatty acids; Beta-aspartylglycine; Microbiological analyses (Carlstedt-Duke, B. (45) 251)

Tungsten
Methanogenic bacterium; (Growth-promoting effect; Incorporation) (Zellner, G. (40) 81)

Turbidimetric assay
Serum sensitivity assay; *Escherichia coli* K1 (Pelkonen, S. (42) 53)

Tween
Trichoderma reesei; Protein secretion; Membrane fluidity; Fatty acid (Panda, T. (41) 85)

Ulosonic acid
Pseudomonas aeruginosa; Lipopolysaccharides; Uronic acid (Knirel, Y.A. (46) 381)

Ultrastructure
Nostoc commune; Matric water stress; Anhydrous fixation (Peat, A. (43) 223)

Microbial mat; Cyanobacterium; Purple sulphur bacterium; Green sulphur bacterium; Pigment analysis; Electron microscopy; - Sediment-microorganism relationship (Nicholson, J.A.M. (45) 343)

Uptake kinetics
Binding proteins: Osmotic shock (Mårdén, P. (45) 233)

Uracil
Enterobacter aerogenes; Uracil dehydrogenase; Barbiturase; (Oxidative catabolism) (Patel, B.N. (40) 33)

Uracil dehydrogenase
Enterobacter aerogenes; Uracil; Barbiturase; (Oxidative catabolism) (Patel, B.N. (40) 33)

Uronic acid
Pseudomonas aeruginosa; Lipopolysaccharides; Ulosonic acid (Knirel, Y.A. (46) 381)

Vaccine
Pseudomonas lectin; *Pseudomonas aeruginosa*; Immunization (Sudakevitz, D. (43) 313)

Valine
Gene fusion; Anaerobiosis; Thiamine, Gene expression; Leucine; Isoleucine; *Escherichia coli*; (Biosynthetic gene) (Reams, S.G. (42) 231)

Valinomycin
Protonmotive force; Nigericin; *Leuconostoc mesenteroides*; Dextransucrase; Enzyme secretion (Otts, D.R. (42) 179)

Veratryl alcohol
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Xanthomonas campestris
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